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ABSTRACT

Different aspects of the development of continuing education in Canadian universities and institutions were studied by the British author through visits to Vancouver, Toronto, Montreal, Winnipeg, Saskatoon, Calgary, and Banff. Short visits were also made to Massachusetts, Washington, Oregon, and California. Comparisons between Canadian and British approaches to continuing professional education were made on the basis of the visits regarding: their activities and development; the organization of the professional staff and activities in the centers for continuing education; university activities in the professional areas of engineering and management; the training of adult educators; and the financing of continuing education activities. Opportunities for part-time degree study in Canada and the United States through the extended day and trimester systems offer new ideas for continuing education in British universities. Appended materials (30 pages) contain the author's notes on the continuing education activities at the universities visited in Canada and in the United States on an individual basis. (EC)

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CONTINUING EDUCATION

IN

CANADIAN UNIVERSITIES

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CONTINUING EDUCATION IN CANADIAN UNIVERSITIES

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INTRODUCTION

The granting of a period of study leave by my own institution, Loughborough University of Technology, Loughborough, Leicestershire, England, made possible a visit to Canada during the period July to October 1974. The friendly co-operation of University Directors of Continuing Education and others enabled a series of visits to be made during this period with the aim of observing and discussing a number of aspects of continuing education in Canada. Visits were made in Toronto, Montreal, Winnipeg, Saskatoon, Calgary and Banff while a longer period was spent with the Centre for Continuing Education at the University of British Columbia. In addition short visits were made to Boston, Massachusetts, and also to Washington, Oregon and California on the west coast of the United States.

It is always helpful to meet with colleagues in another country concerned with work similar to one's own. Such discussions can be refreshing and can also produce new ideas and help one to see one's own problems in a different light. In the case of Canada, it is very helpful that the language of communication is English but it is necessary to recognise that the historical, cultural and political background to education is different between the two countries and these factors can provide motivation for developments which may be appropriate in one place but not in another. Hence the possibilities for comparison and for transferring ideas need to be considered against the background of each country and with some understanding of the reasons why they originated.

It is apparent that many people in Canada, whether in universities, colleges or other institutions, are giving thought to the aims and methods of continuing education and much interesting development is taking place. I feel particularly fortunate in visiting Canada during this period and having the opportunity of considering the situation in England somewhat detached, for a period, from the actual scene of operations. Many people in Britain, also, are questioning some of the traditional ideas about the education of adults and experimentation is taking place in universities, in the colleges maintained by the Local Education Authorities and by the other providers of adult education. There is a further point affecting universities in both countries, namely that they are being subjected to scrutiny, mainly on grounds of cost and of the relevance of their work to the community. Thus attention is being focused in Canada on university work for adults as an important aspect of service to the community and it seems possible that the same could happen in Britain.

It would be appropriate to give a little of the background of Loughborough University of Technology. Formerly one of the ten Colleges of Advanced Technology it became a University in 1966. It has a main emphasis on the education of under-graduate and post-graduate students and on research in technology and science but, of more recent years, has added Departments of Economics, Social Science, European Studies and Education. It has been involved for a long time with the provision of up-dating courses for professionals employed in various fields of technology and science and in 1968 formed a Centre for Extension Studies with the aim of extending the provision of courses for mature people and providing a unit within the University specifically charged with this task. It now organises a range of post-experience courses for those in industry, commerce, education and government, as well as a residential Summer Programme which includes courses of interest to the general public and caters for all members of the family. The Centre draws on the services of staff from academic departments in the University and other specialists from elsewhere; its own staff comprises currently a Director, Assistant Director and two tutor/organisers plus administrative and secretarial staff.

I was privileged to visit several colleges and institutions concerned with continuing education in Canada in addition to universities. I also discussed many types of courses and aspects of working with adults. However, it would make this report too long to detail all of this, and hence it concentrates mainly on those aspects which tend to parallel activities and developments at Loughborough in continuing professional education and some topics, such as part-time degree studies and the training of adult educators, which are of current concern in British universities.

Notes on the universities and colleges visited in the United States are given as an appendix. I was very pleased to have the opportunity of making these visits in the Boston area and on the West Coast, but the institutions visited represent but a small part of the wide range of educational activity to be found in a country so large and varied as the United States and hence it cannot be claimed that they are necessarily typical of the whole. Furthermore the background to developments in the United States has differences from that in Canada. For both these reasons, it seemed appropriate to separate the notes on American institutions from the main body of the report.

It is hoped that the information and comment contained in this report will be of interest to readers on both sides of the Atlantic. Hence brief descriptions are given of educational systems and types of institution in the different countries in an attempt to make the comparisons and comments more meaningful. I am conscious that this approach may raise questions of superficiality, but I feel it is more important to see what can be learnt from underlying motivations, philosophy and organisation.

SOME BACKGROUND POINTS

It is helpful to outline a number of factors relating to Canada and Britain as a background for this report - in particular the geography, population and the organisation of education in each country. This can only be a very broad description which attempts to portray a mean and, of necessity, ignores the wide range of variation existing in each country. Nevertheless I found it necessary to appreciate these background points and readers in one country, unfamiliar with the other, may also find them helpful.

Canada has about 22,000,000 people most of whom live in a band of about 100 miles width parallel to the United States border and which measures some 3,700 miles in length. The number of people living north of this band is limited and the distances between communities can obviously be very great. This contrasts with about 54,250,000 people in Britain within an area which is less than any of Canada's Provinces except for three on the Atlantic sea board. The topography is varied and some parts are thinly populated but in general the distances between communities is very much less than would occur in Canada.

Canada has a two tier system of government - the Federal Government in Ottawa and Parliaments in each of the Provinces. The powers which each exercises are closely defined and, in particular, education is a provincial and not a federal concern. Thus the legislation and administration of education is for a population which may vary from about 8 million in Ontario to under 1 million in the majority of provinces. In Britain, broad educational policy is determined by Acts of Parliament in Westminster and administered in England and Wales by the Department of Education and Science. However, most of the implementation is by Local Education Authorities which enjoy an amount of independence, particularly in educational method, but which operate within the broad framework determined by Act of Parliament and the D.E.S. British universities are independent chartered bodies, separate from the L.E.A.'s, but they do receive public money through the University Grants Committee which thus has some influence on the finances and broad policy control of universities though this does not affect the detailed operation of individual universities. Universities in Canada are usually set up by Act of the appropriate Provincial Parliament and operate with a large element of autonomy but the extent of this may vary in detail from one Province to another.

Turning to the field of continuing or adult education, in both countries there are various providers, namely universities, colleges and other public institutions and private organisations. However, the detail of this provision and the historical reasons for its development are different in the two countries. In Canada continuing education (normally under its former name of extension) was one of the traditional roles of universities particularly in the Prairie and Western Provinces. The founding of universities was associated with the development of a new country and the education and training of adults, with an initial emphasis on agriculture, was one of their implied functions. Other colleges and private organisations, such as the Y.M.C.A., also had a part in extension work. It is in Community Colleges and Institutes of Technology that the biggest expansion is taking place at the present time though the detailed pattern would vary from one Province to another.

In Britain the traditional adult education activity in universities has been one of a non-vocational type frequently linked with the activities of the Workers' Educational Association. However, a number of the new universities, (i.e. those chartered during the 1960's) have been experimenting with different patterns of adult education work. The major provision of classes and the major student numbers occur in institutions under the control of the Local Education Authorities, mainly Polytechnics, Technical Colleges, Adult Colleges (some are residential) and Community Colleges. The types of institution vary between

one L.E.A. and another but in general each L.E.A. is likely to provide a wide range of courses, both vocational and non-vocational. The dividing line between the L.E.A. Colleges and University Adult Education Departments in the non-vocational area has developed by common consent and the universities concentrate on the types of class and subject which are deemed to be of university level.

It would be reasonable to mention three other organisations which have an effect on continuing education in Britain though it is not appropriate here to amplify their individual contributions. These are the Further Education Service of the British Broadcasting Corporation, the Open University and the Industrial Training Boards.

Finally it is relevant to refer to two questions each of which is asked in one country but has little or no relevance in the other. These are:- 'Is the course vocational or non-vocational?' and, 'Is it for credit or not for credit?'

There seems to be no attempt in Canada to classify courses as vocational or non-vocational and it is not necessary to do so. However, in Britain it is a division which has relevance in some universities as mentioned above and also there are separate administrative structures within the Department of Education and Science and within most Local Education Authorities dealing with what are classed as vocational and non-vocational courses. Current thinking is tending to blur these differences (which also cause confusion to some readers of the Russell Report) and some people feel that this division does not have much relevance in today's situation compared with the time when it was initiated in 1919.

In Canada the question of credit arises in the context of part-time study for degrees and other qualifications which are invariably organised on a credit basis. This means that in theory, and quite largely in practice, a student can aggregate relevant study undertaken at different times and in different places towards the degree or other qualification for which he or she is working. Courses in Britain are not organised on this type of credit basis and any student wishing to transfer from one institution to another during a course of study would need to negotiate the transfer individually, based on the merits of the case. Furthermore, very few of the courses for adults referred to above lead to any qualification such as a degree or diploma.

THE ORGANISATION OF CONTINUING EDUCATION

All the universities visited had a unit which was concerned with the development and implementation of education for adult students other than the regular full-time students of the university. Titles vary but the most usual one is now the Centre (or Division or School) for Continuing Education. While some universities retain the traditional title of Extension Division, most have felt that 'Continuing Education' is more descriptive of the aim of making education of suitable types available to the individual throughout his life.

In a university with a wide range of activity in professional and general educational fields, the Centre for Continuing Education (selecting this title as a suitable common denominator) is likely to be organised in the following way. The Centre comprises a number of staff members of academic faculty or equivalent status, each of whom looks after a group of subjects under the overall control of the Director of the Centre. Each staff member has responsibility, within his subject areas, for keeping in touch with potential markets for continuing education (including professional and other associations involved); for planning and initiating courses and other educational activities; for maintaining liaison with academic faculty and taking account of suggestions which they may make; for publicising, administering and operating courses and maintaining control over the budget. For subsequent identification, these staff members will be referred to as Program Directors. The Centre has other support staff to assist with administration, publicity and similar functions.

All Centres are concerned with non-credit courses and, in some cases, also include credit courses in the evenings and Summer Sessions. However there is a move towards the 'extended-day' whereby day-time and evening credit work become merged and are dealt with by the academic departments and the Central Registry, thus separating evening credit work from Centres for Continuing Education. Summer Sessions still mainly involve teachers and here organisational patterns vary - in some cases Summer Session planning and administration is part of Continuing Education and, in other cases, it is performed by another unit within the university. In the case of the University of Toronto with large numbers of part-time degree students, a separate constituent college of the University, Woodsworth College, has recently been formed to look after the interests of part-time students. A similar arrangement exists with Atkinson College, a constituent member of York University, Toronto.

Table II indicates the range of activities undertaken at the universities visited and Table I outlines the organisation of the Centre for Continuing Education at the University of British Columbia, one of the largest centres in Canada. Many other Centres have a similar form of organisation though possibly on a smaller scale.

The majority of universities have some joint (or cross) appointments between the Centre and academic departments particularly in fields such as management, engineering and education. This arrangement enables the person so appointed to have status within the academic department (and possibly to lecture to courses there) as well as being an adult educator in the Centre and having access to expertise in teaching techniques, in the marketing of courses and in administration. Discussion with several staff members who were cross-appointed indicated that the arrangement worked well and did not produce any difficulties other than the possibility of overwork!

In each subject area, the appropriate member of the Centre staff maintains close links with corresponding internal academic departments from which teaching resources are drawn, supplemented at times by tutors from outside the university. Courses for credit are invariably subject to the approval of faculty boards which also control day-time courses but non-credit courses

are mounted at the discretion of the Centre, sometimes after consultation with the appropriate academic department. The attitude of academic faculty towards non-credit courses is variable but usually there seems to be a sufficient nucleus who are interested in taking this type of course for adult students. Some come forward with ideas for new courses but it is more usual for such ideas to emanate from the Centre staff who are in close contact with the adult student clientele.

In most of the universities visited, all non-credit continuing education courses, both professional and general interest, were organised through the Centre for Continuing Education. When exceptions existed they were usually for continuing professional education in the health sciences (i.e. medicine, dentistry, nursing, pharmacy etc.) - such activities being undertaken by a unit within the Faculty of Health Sciences which maintains links with the university Centre for Continuing Education. This point is enlarged in the section on Continuing Education for the Professions.

It would seem that the presence of Continuing Education Centres in Canadian universities has made possible the wide range of provision which exists. A Centre provides a focal point within the university dedicated to the furtherance of education of all types for mature students as well as a point of contact for the general public and professional bodies. The staff are specialised in adult education technique (frequently with degrees in adult education) as well as having their own area of subject specialisation. They are skilled in methods of course planning, which invariably have to be problem oriented to appeal to mature students, as well as being conversant with the needs of their sector of the population and methods of contacting them through publicity. Combining a group of such people into a Centre encourages the cross-fertilization of ideas and enables common services to be provided for administration, printing and finance.

The type of organisation in Centres for Continuing Education in Canada contrasts with that which is usual in most Departments of Extra-Mural Studies (or Adult Education) in British universities. In the latter case the academic staff usually tutor a number of classes as well as undertake an organising role for other classes, drawing on part-time tutors from their university or elsewhere. However these extra-mural departments tend to concentrate on non-vocational courses of a type suited to universities, which would be roughly equivalent in Canada to non-credit liberal arts courses of the more academic type, and for this type of activity, their form of organisation has served well.

Some of the technological universities in England have a greater concern with continuing education for the professions and for them, an organisation similar to the Canadian pattern seems desirable - in fact, the Centre for Extension Studies at Loughborough is so planned. In professional areas it would be impracticable to provide other than a small amount of teaching from the staff of the Centre due to the range of specialist subjects involved - furthermore, the enlisting of teaching faculty from academic departments encourages their involvement in the important work of continuing education for mature students.

CONTINUING EDUCATION FOR THE PROFESSIONS

The major universities which have strong professional faculties for undergraduate and postgraduate teaching and research, invariably regard it as part of their responsibility to make provision also for continuing education for the professionals in their Province. Depending on the university, the range of professions can include

> management (including accountancy, banking, real estate, etc.) engineering, education, law, planning and architecture, social work, health professions (medicine, dentistry, nursing, etc.) and agriculture, forestry, fisheries.

There would seem to be three reasons why the interest in continuing professional education is stronger than that sometimes encountered in British universities.

a) The historical origin of universities in Canada, particularly in the West, was associated with the development of a new land and the encouragement of relevant knowledge and skills. Continuing professional education is a perpetuation of this theme.

b) Education is a matter of Provincial rather than Federal concern and, in many Provinces, there was one university initially which provided education for the professions (though the increased number of universities established since World War II, some of which have professional faculties, is modifying this situation). Similarly most professions have strong provincial associations and thus there has been a natural partnership of university and professional association with common interests in the updating of members of that profession.

c) Provincial Governments require the registration of members of many professions before they are entitled to practice and this involves the entrant having to pass examinations (or having qualifications which provide exemption). For some individuals this provides a motive for attending continuing education classes, but also many of those with initial qualifications wish to keep themselves up-to-date. Beyond this, plans are being discussed in some of the health professions (e.g. dentists in Manitoba) which would require the individual to have completed some updating courses before he or she would be re-registered for a further period. The implications for continuing professional education of any such decisions could well be appreciable.

A frequent method of organising continuing education activities includes the formation of an advisory committee composed of members of the profession (usually arranged through the provincial professional association) together with members of the appropriate university faculties and the specialist Program Director from the Centre for Continuing Education.

The Centre usually provides the organisation for co-ordinating, operating and publicising the university's programmes and an effective Program Director is a key figure in ensuring a successful programme which meets the needs of the practising professionals. The health professions are the main group that may tend to operate a separate continuing education unit and not use the services of a university centre. In such cases, specialist adult educators would be engaged to work with professionally qualified health sciences staff in running continuing education in the health professions. Co-operation would be maintained with the university centre in providing activities which were of joint interest, though surprisingly few 'cross-linking' courses (for example, related to management in the health professions) were encountered.

The purpose of continuing professional education is to provide knowledge and technique related to improving the individual's competence in carrying out his or her job. In some universities, part of the effort is devoted to providing part-time courses for those seeking initial professional qualifications whilst in employment, but the other part involves the updating of those already practising their profession. In the first case, courses rarely qualify for degree credit but more usually lead to a diploma or certificate which is granted by the professional body or by the university in co-operation with such a body - examples often being in the fields of accountancy and management. The second area of updating courses can involve many different professions according to the local requirements and may lead to a qualification of diploma or certificate or, quite frequently, comprise discrete courses not taken for any qualification.

Those involved with the running of updating courses for experienced professionals constantly reiterate the need for them to be 'problem oriented'. Courses must deal with practice on the job and introduce necessary theory or new knowledge when appropriate and, from this point of view, the experience of the Program Director can be useful when planning courses in co-operation with members of the academic faculty.

Since they are of particular relevance in the context of activities at Loughborough University of Technology, specific mention is made of developments which have been encountered in two professional areas - engineering and management.

Engineering

Most universities arrange short seminars of one or two days, or short series of evening lectures, on specialist topics which are relevant to local engineers and, as might be expected, the range is wider in Toronto and Montreal than in the western provinces where there is less engineering design and manufacture. However the extent of this type of updating was less than the writer expected to find. This situation may arise from the present stage of industrial development in Canada which in general requires engineers to be concerned with production and operation, rather than with research, design and development at a sophisticated level - though exceptions exist, such as the specialised technology involved in the processing of timber products or of oil products.

The major interests of engineers are reported to be in management subjects and this arises, no doubt, for the same reason. In some cases they may join classes in management along with those from other professions but some courses are slanted particularly towards engineers. One example of this type is the Diploma Program in Engineering run by the Centre for Continuing Education and the Faculty of Applied Science at the University of British Columbia under the guidance of a Council on Continuing Education for Engineers which includes a majority of senior engineers from local industries. The eight core subjects range from Contract Law for Engineers to Scheduling of Engineering Projects and elective subjects enable individuals to lean towards qualitative or quantitative aspects of decision making. Instructors are drawn from industry and from the university. Not all courses are given every year - both the timing and location in the Province of classes is decided in the light of the demand. Satisfactory completion of 12 courses is required for the award of a Diploma. Over 500 engineers are registered for courses currently, some are working for the Diploma while others are taking individual courses to suit their own requirements.

Two interesting but rather more specialised examples of updating courses were found at the University of Toronto. The first was a series of ten sessions on modern mathematical techniques run specifically for the senior

and middle managers of a large engineering firm. The underlying theme was that these older men needed some instruction on their own so that they could be more conversant with work being done by younger professional staff for whom these techniques formed part of their degree studies.

The second example is the Master of Engineering Degree in Production Engineering available through evening study and intended primarily for those who wish to pursue advanced study related to professional practice. (The Master of Applied Science Degree is more research oriented, requires a thesis and normally involves full-time study). The MEng degree requires the completion of eight one-term courses and a project which may be undertaken on industrial or government premises. While also being in the category of part-time degree studies, this new development also offers a means of updating to the 25 students registered with one of the three departments - Industrial Engineering, Mechanical Engineering or Metallurgy and Materials Science.

Management

Many universities are concerned with continuing education in the field of management and this deals with knowledge and technique applicable to industry and commerce in general, as well as to activities such as accountancy, banking and, to a lesser extent, real estate, insurance broking and others.

Courses are provided for initial qualifications and numbers of students obviously fluctuate from year to year. It is interesting to note that several Centres for Continuing Education have rationalised their courses usually on the basis of a number of core subjects which provide a common denominator between the interests of different professions. More specialised electives are offered (though not necessarily repeated every year) to satisfy the requirements of the individual professional associations. Some discussion with their local associations may be necessary to achieve this aim but it seems that most are ready to co-operate. These courses are approximately of undergraduate level and usually require a student to undertake four or more years part-time study.

More advanced courses at the graduate level leading to a Diploma are offered by some universities (McGill is an example) which normally have a degree entrance requirement. These courses are described more fully in the appendix of this report on McGill University. The same basis of rationalisation of courses has also been applied at the graduate level.

In addition to these courses for qualifications, most Centres offer short courses to meet current needs. Examples are changes in tax laws for accountants, in all aspects of law for lawyers and in management techniques for those in industry and commerce.

The Situation in Britain

In attempting to give a brief comparative picture of the situation in Britain, it is necessary to differentiate between courses for initial professional qualifications and post-experience courses for up-dating qualified people in their professional work - for there tends to be a sharper division between the two than occurs in Canada.

Initial education and training for several professions takes place in universities (and sometimes in polytechnics) - for example, in the case of all doctors, most engineers and some lawyers. However, until recently, those entering accountancy, banking, several branches of legal work and some other professions had tended to do so as articled pupils or trainees who studied part-time in the evening at Technical Colleges, or by correspondence, for the examinations of their professional body - universities have taken practically

no part in this, though the polytechnics have had a greater involvement. The position is changing, since many of these professions are encouraging a larger graduate entry, initially through reducing the period of pupil-ship for an entrant with a degree and giving exemption from certain subjects in the professional examinations which may have been studied previously. A further step has been the development by polytechnics and some universities of degree courses specifically oriented towards the needs of a particular profession, though still planned on a broader educational foundation than the corresponding professional examination. Degrees in law have traditionally been offered by many universities and polytechnics but, as more recent examples of this development, mention can be made of the increasing number of degree courses including accountancy, and the introduction of degrees emphasising banking - one of the first being at Loughborough University.

It cannot be claimed that the comments made above provide a detailed analysis of the complex field of initial training for the professions in Britain and indeed many professions such as planning and architecture, the health sciences, agriculture and education have not been mentioned. However, it can be seen that much of the contribution by Canadian universities towards the part-time initial training for several professions (accountancy, banking and others) does not have a counterpart in British universities, though it may to some extent in polytechnics. This is one (but not the only) factor contributing to the larger student numbers, particularly of part-time students, in Canadian universities.

Post-experience courses are provided by a number of universities and polytechnics but the situation is, in general, very patchy either because there is no provision for some professions or because the provision is random and unco-ordinated. In medicine there are postgraduate centres throughout the country and it would seem that there is co-ordination between the profession, and the university medical schools and teaching hospitals - however in most other professions there is no similar mechanic to draw together those in practice in the profession with those who may be concerned with teaching in academic institutions.

Engineering can be taken as an example. It is an important industry in Britain employing a large number of people of varying types and producing a very wide range of products and services, through organisations both large and small. Many of the professional engineers employed therein are members of one of the Professional Institutions, each of which caters for a major branch of the profession. These are national institutions and there is some co-ordination through the Council of Engineering Institutions. Over two-thirds of the fortyfive universities in Britain and most of the thirty Polytechnics have faculties of engineering and these institutions will have provided the initial education of many of the professional engineers now employed in the industry. However, there is insufficient co-ordination of post-experience training which is presumably a concern common to industry, the individual, professional and academic institutions.

Among the means available for an engineer to keep up-to-date in his subject, mention must be made, firstly, of acquiring knowledge on the job and through reading. However, this may not provide a satisfactory means of learning about new knowledge or technique or of entering a new type of employment, whether the move arises from the person's own volition or through redundancy in the current job. Hence there is need for means of imparting appropriate knowledge and skill to these types of people, which can be provided, in part at least, by suitable courses, conferences and seminars. These may originate from a variety of sources including:-

a) the company providing its own 'in-house' courses drawing on its own staff or outside experts as instructors;

b) one of the Professional Institutions - these provide an important means of propagating and discussing advanced technical knowledge in a specialised field;

c) a university or polytechnic which may provide courses or conferences on topics in which it has some expertise - it is part of the concept of polytechnics that they should undertake this type of activity and most do; some universities are active also, particularly the 'technological universities' which were formerly Colleges of Advanced Technology.

The present situation needs improving and hardly seems satisfactory for the task involved, particularly with the increasing likelihood of engineers having to change their employment due to altering economic and technological circumstances. It merits further consideration, with a particular emphasis on the following points.

a) There is a need to have a framework for drawing together those active in the profession with those in academic institutions, to review the actual requirements for updating and retraining and to develop a suitable structure of courses. This needs to be done on an appropriate scale - one academic institution with an advisory committee from local industry does not cover a sufficiently wide field whereas a national approach is too broad to discuss the make-up of individual courses because of the diverse requirements. However, maybe the initial moves should be made nationally and then devolve by sectors of industry or regionally - in the latter context, it may be possible to learn from Canada's experience of Provincial organisation referred to in the introductory part of this section. The Professional Institutions and the Industry Training Boards could well play a helpful role in this.

The Institution of Civil Engineers has taken an initiative through the publication in 1974 of a booklet 'Mid-Career Training' jointly with the Institutions of Municipal Engineers and of Structural Engineers. This provides an analysis of the situation in civil engineering and gives a checklist for the selection of courses. Appendices give recommended subjects of study (through courses or otherwise) for different levels of responsibility in typical civil engineering activities. The Institution also maintains a reference list of courses notified to it.

b) The range of courses needs to cover not only the latest developments in a branch of technology (the type which has received the greatest emphasis so far) but also updating courses to improve the performance of the average competent engineer who is not working at the frontiers of knowledge and the needs of the engineer who requires retraining for a different type of employment. Also there has been a tendency to think only in terms of technical knowledge and yet many engineers have to control (or, as a minimum, be conscious of) resources of manpower, materials, money and capital equipment for which they may have received little training. These aspects tend to become more important as an engineer progresses and hence courses dealing with the Control of Resources should have an important place in any scheme of post-experience courses (The Diploma Program for Engineers run by the University of British Columbia is an example of this type of activity which was described earlier in this section). It is worth noting that this type of study is to some extent independent of the branch of engineering in which an engineer has specialised but it is specifically oriented to the resources problems encountered in engineering and differs from the more general approach which may be adopted in management courses.

c) A lot of current thinking centres on the employer analysing job requirements and then seeking suitable means of updating his employees. This is

obviously one of the functions of a good employer but it is felt that it should not diminish the individual's motivation to improve himself and the satisfaction which he (or she) can get from improving performance on the job. Thought needs to be given to the further encouragement of a climate of self-motivation and this will undoubtedly involve questions such as the time tabling of courses to produce minimum interference with normal working hours and the understanding co-operation of employers. In this context, reference must be made to the Training Opportunities Scheme run by the Training Services Agency (associated with the Department of Employment) which provides help for individuals requiring retraining for another job - but this is for those not currently in employment and hence does not relate to the self-improvement of those in employment referred to above.

DEGREES BY PART-TIME STUDY

Until the advent of the Open University the opportunities for working for a degree part-time in Britain while engaged in other employment were somewhat restricted. The London University External Degree system provided some possibility and those living near London could attend Birkbeck College in the evenings but elsewhere opportunity would be limited or non-existent. The success of the Open University in Britain has demonstrated that there are appreciable numbers of mature people with the motivation and capability for undertaking rigorous study for a degree and some faculty members in the 'traditional' universities are questioning whether their institutions can stand aside from taking their share in this development. Not unnaturally, it is those concerned with the education of adults in the universities who are among the first to raise this question. Hence the opportunities for part-time degree study which exist in Canada and the United States are of considerable interest to a visitor from Britain.

The North American system has two facets which facilitate part-time study (and also 'dropping out' from and re-entering study courses) - firstly, a greater flexibility in the scheduling of courses which, in some cases, includes evenings and summer sessions; and secondly, the existence of a credit system. The first point means that there are more periods in the day and during the year when a student can study a course and combine paid employment with this study; this is facilitated by the fact that most courses run only for one semester or one quarter (i.e. a period of 10 to 14 weeks) and in summer sessions this may well be concentrated into a 6 week period. By contrast in Britain the majority of courses would spread over the whole academic session (about 30 weeks). Secondly, the credit system means that, in general, the student can count successful completion of any approved course towards the ultimate goal of getting a degree qualification.

It must be accepted that there is much more part-time study for degrees in North America in the liberal arts area than in professional areas such as science or engineering (see note below) and that so far there has been a large recruitment of teachers wishing to obtain first or higher degrees. This has been the case particularly in Summer Sessions which have been dominated by teachers. However some Canadian universities see a change in this pattern of recruitment with fewer teachers and more from other backgrounds taking advantage of Summer Sessions and evening study. While the flexibility of the system is best demonstrated in the liberal arts area, the same basic scheme applies to scientific and professional studies even if the sequence of studying courses may be restricted by the need to study firstly the greater number of basic core subjects.

In fact many Canadian universities are innovating further developments to facilitate part-time study, realising that this is a major channel of service to the community. This is a recurrent theme in universities, encouraged by most Provincial Governments.

Among the interesting developments which have been seen, mention can be made of:-

a) The Extended Day

The usual system of administering evening classes is through one section

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note - In engineering courses the usual arrangement, (as at the University of Toronto and Sir George Williams University, Montreal) is that only the initial 1 or 2 years may be studied part-time and that the final period of a minimum of 2 years for a bachelor's degree must be in residence.

of the Extension Division. Their task is to plan classes to meet, as far as possible, the requirements of the students recruited and then to negotiate with the academic departments to provide instructors. The finance is handled by the Extension Department and instructors receive extra payment on an agreed basis.

A number of universities (including Calgary, Simon Fraser and Manitoba) are moving to the basis of the 'extended day' which merges the requirements of regular and part-time students by scheduling all classes over an extended period between (say) 8.30 a.m. and 10.00 p.m. Thus part-time students may be able to attend in the evenings while regular students may also have some of their classes scheduled during the evenings with the expectation that they will have fewer classes and free time during the day. This system is claimed to have several advantages - more economic use of faculty time since classes would not be repeated unless student numbers so required; maintenance of relative standards between regular and part-time classes since, usually, there will be only one class; and the beneficial effect which older mature students usually have on the composition of the student group. In principle all teaching by faculty members then becomes part of their normal load; however, dependent on the relative numbers of regular and part-time students and on the need to repeat classes, it may be necessary to engage additional faculty members or to make some overload payment irrespective of whether the faculty member does extra teaching in the day time or during the evening. Hence the relative costs to a university of running an extended-day programme, compared with a regular day and an evening extension programme, can only be assessed in the light of its particular circumstances.

It is worth noting, however, that the cost per hour of instruction is invariably lower when paid on an overload basis than when it is part of normal load due to the 'research and administrative elements' in a full time salary.

b) Trimester System

Flexibility of scheduling throughout the year can be provided by a Trimester System as opposed to the more usual two semesters, possibly supplemented by summer sessions. Simon Fraser University, which is believed to be the main exponent of the trimester system in Canada, runs three academic terms (or semesters) of 16 weeks. Each semester is self contained and has its own final examinations. A student may attend one, two or three semesters within the calendar year and thus adapt the method of study to suit his or her own personal circumstances. Currently the Division of Continuing Education arranges a programme of credit courses in the evenings which increases the range of opportunities for part-time students but it is possible that the university may transfer to the extended-day basis. This trimester plus evening classes arrangement would seem to give the part-time student two degrees of flexibility - the possibility of classes at different times during an extended-day and at different periods of the year. As the Calendar states, students are not classified as 'part-time' or 'full-time' but are merely carrying different course loads.

If the system of degree study in Britain were to be made more flexible, then it is relevant to consider in what ways flexibility is most required and what can be learnt from North American experience. There are many academics in British universities who would defend strongly the present system and any changes should preferably build on its merits. It is felt that the extension of possibilities for degree study to part-time students is the most relevant extra flexibility required in the British system and this could be achieved, in some measure, without recourse to a full credit system, which would require

acceptance by a majority of universities if it were to be effective. Instead of allocating credit for each course taken, as in the North American system, a useful 'half-way' transition point can be provided by the newly instituted Diploma of Higher Education (DipHE). This is awarded after successful completion of two years study of a range of subjects with an A-level entry qualification. The intention is that suitable students can proceed to a bachelor's degree after one or two years further study provided that their DipHE study is accepted as a satisfactory pre-requisite.

The DipHE thus provides a point at which a student could transfer from one institution to another or could change from part-time to full-time study or vice-versa. The Diploma in Higher Education was introduced in the White Paper 'Education: A Framework for Expansion' (Cmnd 5174 of December 1972) and claims were made that greater flexibility in higher education would be achieved. However it did not mention the possibilities of part-time study for the Diploma or for subsequent degree study, thus omitting one desirable degree of flexibility. It is felt that the provision of part-time courses would be very relevant for mature students and should be encouraged in appropriate colleges and universities. It is to be hoped that the Open University, as one of the major providers for part-time students, can also be included so that a student could, for example, study part-time with the Open University to a level equivalent to DipHE and then transfer to another university to complete a degree, possibly in a speciality not available through the Open University system.

As a final point in this section, it is interesting to postulate how students and staff in British universities would react to the 'extended day'. It seems that some of their Canadian counterparts are finding advantages in the system quite apart from the benefits which it brings to part-time students. It would be useful to recheck Canadian experience after the system has been in operation for a longer period.

THE TRAINING OF ADULT EDUCATORS

The concept of the 'Adult Educator' is well established in Canada as a person who is skilled in the arts of planning, teaching, administering and evaluating courses and other educational processes specifically for adult students and who is conscious of the contribution which a system of continuing education can make to society at large. In the main, this concept is held independently of the nature of the subjects taught and leads to the strong feeling among those working in this area that they are all members of the profession of Adult Educators. In fact, they may work as administrators or teachers in continuing education in universities, vocational or community colleges, school boards, industry, commerce, unions, voluntary agencies or in services such as those concerned with agriculture or the health sciences.

Entrance to the profession of Adult Education is usually through some other discipline or field of practice and hence training courses are at the graduate or post-experience level. Training for Adult Educators is provided by many universities, some of which also carry out research associated with adult education. Another institution, pre-eminent in this field, is the Department of Adult Education of the Ontario Institute for Studies in Education, Toronto.

Within the university, courses for adult educators are usually provided by a Department of Adult Education within the Faculty of Education. This has its own group of academic faculty who have specialised in adult education as opposed to schools or other aspects of education. Its work is somewhat separate from that of the rest of the Faculty, for to quote from "Pioneering a Profession in Canada" - a booklet compiled by the Adult Education Research Centre at the University of British Columbia in 1973 to commemorate the retirement of Dean Neville Scarfe, the initiator of graduate study in adult education at the University:-

> "Graduate students in adult education come from a variety of fields and disciplines and go to a different social milieu to work with a different population than do most students in a Faculty of Education. As a result, most of the courses in that Faculty as well as the normal degree requirements, which are geared to the needs of teachers or other school personnel, do not meet the needs of those in adult education. This necessitates a different approach to graduate education that is not always understood or generally accepted by the Faculty. Although this problem has been largely resolved it does necessitate vigilance against unintentional restrictions that may be introduced."

The Department of Adult Education is thus a separate unit from the Centre for Continuing Education which organises the university's activities in continuing education though there may well be co-operation between the two in various ways. Courses are usually provided at the Diploma and Master's levels and most students would already be engaged in adult education work and would study part-time for a number of years to gain their qualification. Specialist short courses are also organised.

Examples of courses from two universities are as follows:-

University of British Columbia

Diploma programme requires a student to complete four mandatory courses, one elective course and a one month internship in an appropriate adult education agency which is supervised by the student's adviser. The mandatory

courses are

Introduction to Adult Education
Methods of Adult Education
Historical, Political and Social Foundations or Mass Media
Seminar for Diploma Students.

The elective course may be chosen from a relevant field such as Agriculture, Sociology, Business Administration or Social Work.

Most students are practitioners - a degree is not mandatory for entry if the student is accepted as having suitable work experience and the capability of benefiting from the course. With intensive work, it may be possible to gain the Diploma after one year's study.

Master of Education (M.Ed) emphasises the expert practice of adult education while the Master of Arts (M.A.) puts emphasis on research and its application to adult education. Both require study of defined courses which terminate in a comprehensive examination for M.Ed students and the completion of a thesis for M.A. students. A requirement to complete satisfactorily a supervised period of field experience is just being introduced into the M.Ed degree.

Doctor of Education (Ed.D) requires further study beyond the Master's degree (usually M.A.) and a minimum of two years in residence together with the submission of a dissertation. (Holders of the degree are reported to be occupying positions in Health Sciences, Agriculture, University Extension and Continuing Education).

In order to provide encouragement for those trained in one of the Health Sciences to become specialists in continuing education, a scheme of study has been developed in co-operation with the Division of Continuing Education in the Health Sciences. Financial assistance can be provided through a Kellogg Foundation Grant to assist suitable candidates to gain a Diploma or higher degree in Adult Education on a similar basis to that given above.

In co-operation with the Centre for Continuing Education a range of specialist one and two day seminars is run during the year dealing with topics of concern to adult educators.

Examples from the programme for Fall 1974 include Teaching Adults, Group Leadership Skills, Motivation for Adult Learners, Identifying Training Needs, and Attitude Structure and Change.

One event which has gained a national reputation is the 'Chautauqua by the Pacific' sponsored by the Department and the Centre together with the B.C. Association for Continuing Education and the North-west Adult Education Association. It takes place in June each year and, on each of the five days of operation, three sessions are planned concurrently. Each deals with a topic appropriate to adult educators thus offering participants a wide choice of options. In 1974, 200 people attended and there were 600 registrations in 19 different sessions.

University of Saskatchewan, Saskatoon

A graduate student in Continuing Education can work towards

a) A Postgraduate Diploma in Continuing Education which requires satisfactory completion of 5 courses at graduate level, three of which must be from the

program's offerings.

b) A Master of Continuing Education which requires a thesis in addition to the course work.

c) A Master of Education in Continuing Education, with thesis if a student has sufficient pre-requisite classes in education.

A full time student given release by an employer, may complete the Diploma in the nine month regular session though the degree is likely to take 18 months, because of the thesis requirement. Part-time students can take one or two courses per session and possibly others during the summer session. Courses are scheduled at times to help those in full time employment achieve a Master's degree within the required five year period. The potential entrant, in addition to possessing a degree of acceptable standing, must have the equivalent of five years practical experience in a field related to continuing education.

The Continuing Education Program includes the following courses:-

Psychology of Adult Behaviour
Continuing Education in Today's Society
Group Processes and Communication
Program Planning and Evaluation
Administration for Extension Workers
Adult Counselling in Continuing Education
Psychological Backgrounds of Adult Education
Comparative Continuing Education
Community Development
Research Methods in Continuing Education

Certificates for Instructors in Vocational Schools and Community Colleges

Several universities provide courses to assist the training of instructors employed in Vocational Schools and Community Colleges who can be concerned both with the initial training of students who elect to go to these types of institution and with the retraining and updating of adults. These courses are not at graduate level and two examples can be quoted where the course is taken with the aim of gaining certification as a teacher by the Provincial Government. One such scheme is operated by the University of British Columbia and includes subjects such as Survey of the Public Education System, Methods of Instruction, Methods of Evaluation and the requirement to complete a project. The course takes two years of study, part-time and during summer vacations, and certification can mean an increase in salary.

The second is in Quebec where all students proceeding to the tertiary level are now required to enter a CEGEP (Collège d'Enseignment Général et Professionel). This provides a three year professional programme for some students and a two year pre-university programme for others. An experimental programme is being initiated by McGill University for the training of teachers in the CEGEPs over a two year period of part-time and summer vacation study leading to certification by the Quebec Government.

The Training of Adult Educators in Britain

It would be fair to admit that interest in the pedagogical training of those involved with the education of adults of Britain is less strong than it is in Canada. The same could apply to those engaged in vocational training but not to teachers in schools where, in most cases, there is a formal requirement to complete an approved course of teacher training and to be registered as a 'teacher' in addition to possessing any requisite subject qualifications.

Postgraduate Diploma Courses in Adult Education are provided by a limited number of British universities including Edinburgh, Glasgow, Hull, Leeds, Leicester, Liverpool, London, Manchester and Nottingham. The minimum duration is one year's full time study but all can be taken part-time, requiring two or more years of study, and some are available only on a part-time basis. The range of subjects studied is broadly similar to those quoted above for the two Canadian universities and, in addition, a project or dissertation would be expected. There is however an organisational difference between the two countries, namely that in Britain such courses are almost invariably initiated and run by the same department (usually called Adult Education or Extra-mural Studies) which is also provicing continuing education classes for the community. Thus there is a close link between the training for and providing of adult education which may not be so apparent in the Canadian system of splitting the two activities between two separate units, though in practice this often works well. There seems to be common ground in feeling that the training of adult educators requires a different emphasis from that given to the training of school teachers.

Those who take Diploma courses are likely to be employed, or may be seeking employment, in adult education work in universities, Local Authority Colleges or voluntary organisations but, so far, they represent a minority of those so employed. They are likely to be engaged in non-vocational fields and for those concerned with job-related courses for adults, whether at the craft or professional level, there is less training provision.[‡]

It is true that much of the methodology is applicable, independently of the subject matter to be taught, but this is not completely so. For those concerned with instructing in skills (for example in engineering, secretarial work or handicraft) part-time courses are provided in some Technical Colleges for examinations sponsored by the City and Guilds of London Institute, but for those involved with post-experience updating courses practically no training exists which emphasises the aspects unique to this type of work.

[‡]Apart from that provided by the four Colleges of Education (Technical) which specialise in training teachers for Technical Colleges by full time or block release courses. However the main volume of work in these Technical Colleges is concerned with the training of younger students and only a minority part with post-experience adults.

THE FINANCING OF CONTINUING EDUCATION

The amount of money available to run continuing education activities is dependent on the fees charged and the amount of grant or subsidy received. The major item of cost is the payments to lecturers though other expenses may arise through publicity, printing and possible contribution towards overheads. The fees charged for courses can vary quite appreciably between different universities and they are likely to be higher than those charged by neighbouring community colleges. In order to examine the position further, it is helpful to subdivide the types into credit courses, professional non-credit courses and general interest non-credit courses.

Credit courses may be provided through evening or weekend classes, during summer sessions, or as part of an extended day system and in all cases the fees charged to students are likely to be related to those for full-time students. For example, the cost of an evening course running for 3 hours per week for about 13 weeks can range from about $45 to $100 according to the university - i.e. a cost per hour of $1.15 to $2.60. Universities in Quebec receive a larger grant for credit students and the catalogue for McGill indicates different fees for some graduate level management courses depending on whether the student is registered for the Master of Business Administration ($57 per course) or taking the course not for degree credit ($85 per course). This was the only public statement noted about differing levels of grant between credit and corresponding non-credit courses but it appears that universities in several provinces receive a higher grant in respect of credit courses.

The lecturers instructing on these types of credit courses may receive overload payments (ranging from about $20 to $45 per hour) or less frequently, the work may form part of their normal teaching load.

Professional non-credit courses may take place in the evenings over a period which is usually about 13 weeks or alternatively may be full-time for a few days or involve the weekends. They may form part of a programme leading to a certificate or diploma and may, on the other hand, be discrete courses on single topics. The student fee can vary widely and usually takes account of the type of course, its potential market and the presence or absence of any grant. Assistance by grant or subsidy for this type of course is very much the exception and in fact such courses are usually budgeted individually and the fee income, in addition to covering lecturers' fees and other direct expenses, would often be expected to contribute a further amount towards overheads i.e. part of the cost of running the Continuing Education Centre.

The lecturers contributing to these courses would be paid on a similar basis to that outlined above for credit courses or, in the case of specialist one-off courses involving outside experts, fees would be negotiated individually.

From the student viewpoint, the level of fee can be appreciable and, for those studying part-time for a certificate or diploma related to their professional association, the cost may be several hundred dollars per year for several years in addition to the membership fee payable to their association. It was not possible to establish whether in general any financial assistance was given by employers to these part-time students. For specialist short full-time courses, assistance from employers is more likely and they must also agree to absence from work for those whom they think will benefit from the course. Some students would be self-employed and make their own decision about attending - in this context, an interesting scheme exists in British Columbia whereby Family Physicians within the Medical Association pay 1% of salary into an 'education bank' from which course fees and a loss of income payment is made to those attending approved continuing education courses.

Non-credit general education courses are subjected to the same budgeting approach though there is sometimes the possibility of a general or specific grant and the expected rate of contribution to overheads is not usually so high as in the case of professional courses. General grants may differ according to the Province varying from zero to the increasing assistance being provided in Alberta and in many universities it is possible to admit those over 65 years at considerably reduced fees. Specific grants may arise from provincial governments or private agencies because they wish to further courses in particular subjects. However, assistance of either type is rather the exception and the resulting fees to the student are, by British standards, quite high bearing in mind that these will invariably be paid out of the student's own pocket. They vary according to the nature of the course, the cost of materials and the number of students who can be accommodated but, in general, they would range from about $1.50 per hour of instruction upwards.

It is interesting to make comparisons with the situation in British universities. There is currently no direct equivalent of part-time credit courses - other than possibly in the Open University. Of the professional courses, those which lead by part-time study to initial qualifications would find their counterparts in Technical Colleges but several universities (and polytechnics) provide specialist short courses for those in industry, government and the professions. The method of budgeting these courses would tend to be similar to the Canadian system though the overhead element, if any, would be lower, and the student numbers (on a pro-rata basis according to the length of the course) would usually count as part of the institution's student strength which could influence indirectly the amount of grant received from the government. Making some allowance for the differing levels of remuneration and cost of living between the two countries (which might be indicated by assuming an exchange rate of about $5 = £1 rather than $2.20 = £1) then costs of these types of course in Canada are not usually very different from corresponding ones in Britain.

It is in the case of general education courses that the biggest financial difference arises. Those universities in Britain which concentrate on 'non-vocational adult education' deal with the more academic courses of this type while the more practical courses are provided by Local Authority institutions. These universities have 'Responsible Body' status and can qualify for grants from the central Department of Education and Science which in practice can cover up to 50% of the costs of providing approved courses; in addition some finance is provided from the university's own funds. The Local Authorities regard adult education courses as part of the public provision of education and also subsidise their courses. Thus in both cases, the level of fee charged to the student is low and, traditionally, is expected to be so. Taking some current examples, the cost for evening courses by each of the providers averages under £0.10 per hour (equivalent to $0.50 at the 'assumed exchange rate' of £1 = $5.0).

Continuing education for adults has been regarded in Britain as part of the educational service provided from the public purse - though admittedly the part most susceptible to cuts in times of stringency. Some adult educators encountered in Canada would advocate more public finance being made available for general continuing education and there seem to be some moves in that direction. However, classes seem to thrive in Canada despite the fear of some that worthwhile students are excluded on grounds of cost. In Britain, shortage of finance usually arises through the restriction or exhaustion of the grant from public funds since the current fee levels generally produce only a minor part of the income and suggestions that fees be increased appreciably are usually viewed with apprehension. However I tend to the view that some increase in fee levels is preferable to the non-provision of courses, on the basis that students are likely to be willing to pay more for an experience which they value.

CONCLUSION

There are three factors which have a bearing on continuing education within a university context - firstly, the attitude of government expressed through the policy adopted and the financial provisions made; secondly, the expectations of the general public and the response which they make to what is provided; and thirdly, the reaction of the university in general towards the continuing education part of its function. The same factors apply in Canada and Britain but there are subtle differences in the ways in which they operate and reference has been made to these in appropriate parts of the report.

Changes in the way these factors operate are not likely to occur rapidly, but there is an obvious interaction with the methodology of continuing education - at least in so far as better provision is more likely to draw forth more support from government, public and university. Some of the aspects of Canadian operations which I found of most interest are summarised below:-

a) the wide range of continuing education provision made by many universities and the general absence of administrative divisions between vocational and non-vocational courses - it is probably the case that no university in Britain has the range of activity encountered in the larger Canadian universities;

b) the initiating and co-ordinating role undertaken by Centres for Continuing Education and the extent to which members of academic faculty are drawn into continuing education work;

c) the flexibility of time tabling of continuing education classes involving daytime, evenings, and sometimes weekends, as well as different periods of the year;

d) the experimental work being undertaken with different media to reach isolated communities;

e) the possibilities for part-time degree study;

f) the work being done in continuing professional education, the means of liaising with professional associations and of organising appropriate (usually problem oriented) instruction;

g) the concern about the training of adult educators;

h) the reactions of students particularly with regard to motivation, continuity of study and costs involved.

Finally it is interesting to note the comments made in the last of this year's series of Reith Lectures on 'The New Liberty' given by Professor Ralf Dahrendorf, the recently appointed Director of the London School of Economics and the former Commissioner of the European Economic Community, whose special responsibilities included Research, Science and Education. In the final lecture called 'Steps in the Right Direction', he discusses some of the measures which can and must be undertaken to bring about a change from expansion to improvement as the main theme in the development of our society. He places high on the list a system of continuing education to give people the opportunity to do new things, to improve themselves and to undertake post-experience courses. He advocates two interesting ideas - the possibility of 'sabbatical years' for everyone and, alternatively, a three year "tertiary education voucher" which could be redeemable in toto at age 18 or in stages throughout life.

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Three trips were made from Canada to the United States and I am grateful to my hosts for making these possible and for arranging visits to academic institutions in their vicinity - Dean A. K. Borman of Northeastern University, Boston; Dean L. W. Schram of the University of Washington, Seattle; Dean M. R. Stern of the University of California, Berkeley; and Dr. Ann Litchfield of Oregon State University, Corvallis.

To many others, too numerous to mention, I would like to express my thanks for their help, invariably given in such a friendly manner, which made this visit so interesting, instructive and enjoyable.

R. L. CANNELL.

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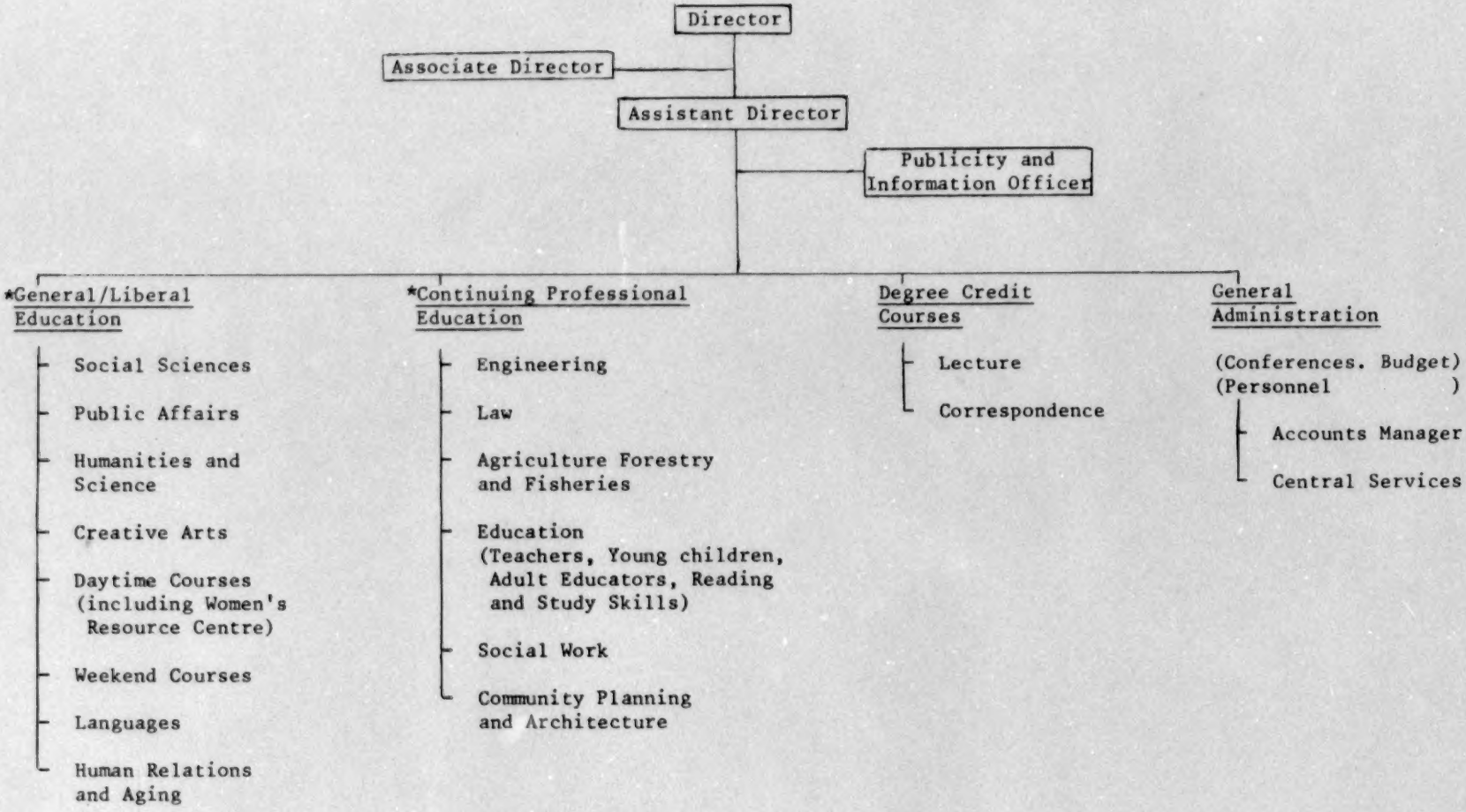
CENTRE FOR CONTINUING EDUCATION

UNIVERSITY OF BRITISH COLUMBIA

TABLE I

ORGANISATION CHART



*There is a Program Director in charge of each of the above areas.

CANADIAN UNIVERSITIES VISITED

TABLE II

	Broad Range of Activities		Part-time Credit Programme	Summer Sessions
UNIVERSITY OF CALGARY Division of Continuing Education	Engineering and Geology Business Social Welfare Science and Mathematics	Education Fine Arts Women's Programmes Humanities	Yes - moving to 'extended day'	Yes - administered by Division of Continuing Education
UNIVERSITY OF MANITOBA WINNIPEG Extension Division	Management Professional Studies (Dentistry, Home Economics, Engineering, Agriculture, Nursing, Medicine, Education) Social Work	Languages Community Studies (Municipal and Indian affairs, mainly off-campus) Evening Institute (General interest courses)	Operate 'extended day' - not part of Extension Division ‡	Yes but separate organisation
UNIVERSITY OF SASKETCHEWAN SASKATOON Extension Division	Agriculture Business and Industry Home and Family Leadership Development	Social and Economic Development Inter-cultural relations Liberal Studies	Yes - part of Extension Division since 1971 ‡	
UNIVERSITY OF TORONTO School of Continuing Education	Business Public Administration Criminology Personnel and Industrial Relations	Education Engineering Languages General Interest	Undertaken by recently formed Woodsworth College ‡	Yes - in wide range of subjects
YORK UNIVERSITY TORONTO	Education Management	Human Relations and Social Development	Undertaken by Atkinson College	
McGILL UNIVERSITY MONTREAL Centre for Continuing Education	Management - Graduate Management - Undergraduate and Certificate Courses Education	Engineering Languages Liberal Arts	For degree of Bachelor of Education and Bachelor of Commerce mainly	Yes - separate organisation - includes some management subjects

TABLE II(Continued)

	Broad Range of Activities		Part-time Credit Programme	Summer Sessions
SIR GEORGE WILLIAMS UNIVERSITY MONTREAL Continuing Education Division	Business Administration Executive Development Journalism Special Courses on current topics	Music, Cinema Creative Arts Liberal Arts	Provided by Evening Division and by Continuing Education Division when run off-campus	Yes - run by individual departments plus Special Institutes
UNIVERSITÉ DE MONTRÉAL Service d'Education Permanente	Management Education Languages Political Science Industrial Relations Public Relations	Theology Quebec Studies Nursing Literature Theatre Arts	Yes - run by Service d'Education Permanente	
SIMON FRASER UNIVERSITY BURNABY B.C. Division of Continuing Education	Economics Commerce Education	General interest courses	Currently run by Division of Continuing Education. Moving to 'extended day'. Some courses off-campus	Yes - mainly teachers but university operates trimester system
UNIVERSITY OF VICTORIA Division of Continuing Education	Education Nursing Business Management	Arts, Science Fine Arts	Evening credit courses - all faculties Late afternoon education only	Yes - operated by Division of Continuing Education
UNIVERSITY OF BRITISH COLUMBIA VANCOUVER Centre for Continuing Education	Wide range - See Table II		Lecture and correspondence courses run by Centre for Continuing Education. Proposed move to 'extended day' ‡	Credit courses by separate organisation Non-credit by Centre for Continuing Education

‡Correspondence (Independent Study) Courses are also provided in some subjects

i) UNIVERSITY OF BRITISH COLUMBIA, VANCOUVER

Centre for Continuing Education - Director, G. R. Selman, B.A., M.A.

The Centre is one of the largest and best known among Canadian universities with a wide range of activities. In 1972/3 it had over 3,400 enrolments in credit courses and 23,400 in non-credit courses. There is a current move to extend the possibilities for part-time degree study by means of increasing the number of credit courses available in the evenings and at weekends (to be achieved in part by time-tabling courses in the evenings to suit both part-time and regular students), as well as by improving the independent (or correspondence) study system. In addition, publicity about courses is being issued earlier so that part-time students can make plans for their study over several years. Correspondence courses have been available for many years but a range of new courses is currently being developed with the assistance of a special Provincial grant. Part-time credit courses are available in the Faculties of Agricultural Sciences, Arts, Commerce, Education, Science, Nursing, Physical Education and Graduate Studies.

However, the bulk of the University's Continuing Education Program is in the non-credit area and of the over 23,000 enrolments approximately half are in professional continuing education and the other half in the general or liberal educational field. In each area the range of subjects covered is very wide as can be appreciated from the organisation of the department; (See Table I). There are six Program Directors concerned with the development of continuing professional education courses and eight Program Directors in the general and liberal education area. There are two other sections in the department - one deals with the degree credit work mentioned above and the other with the general administration, finance and conference organisation work undertaken for the department as a whole. In the continuing professional education field, over and above the work done by the Centre, there are two other sections within the University - Continuing Education in the Health Sciences and Continuing Education in Commerce and Business Administration, each of which provides courses within its own field and is referred to later.

It is not feasible to catalogue all the different courses and activities undertaken by the Centre but mention will be made of some points which were of interest.

Education Extension. This accounts for about a third of the enrolments in the professional and technical field and includes the in-service training of teachers. In addition, part-time and evening credit courses are provided for teachers and the administration is co-ordinated through the credit section referred to above. A further activity is the running of a certificate programme for instructors in vocational schools. On successful completion of the course these instructors can qualify for an award granted by the B.C. Ministry of Education. The developmental thinking regarding the in-service training is that more should be done on site in the school districts attuned to local requirements and with more teacher participation in addition to the work being done on the Campus as at present.

Engineering. A Council on Continuing Education for Engineers has been set up by the University which has a majority membership from senior engineers practising in the area, together with members of the Faculty of Applied Science and of the Centre for Continuing Education. This Council advises on continuing education matters and one recommendation was the setting up of a Diploma programme in administration for engineers which is one of the main on-going activities in this area. It is referred to more fully in the section of this report on Continuing Education for the Professions. In addition, a number of other courses and seminars are provided. Some deal with management topics such as production planning and inventory management, while others deal with current

technical topics or provide a 'state of the art' review of a particular technical area. There is apparently more difficulty in recruiting viable numbers on technical subjects since there may be fewer engineers who are interested in any one topic. However, a number are run successfully each year though there will be some which do not draw sufficient recruitment.

Public Affairs. Series of courses are provided related to different aspects of international affairs but the move is going more towards local problems. Some of these have been discussed in a series provided through Cable Vision. An interesting activity run in co-operation with the Union of B.C. Municipalities is a series of week-end courses in different parts of the Province for the training of elected councillors. Special case studies have been prepared and assistance is provided by a number of officials from the Provincial and Local Governments.

Community Planning and Architecture. The increasing concern about planning in British Columbia is providing more possibilities for continuing education in this area and has also encouraged the pioneering in Canada of courses which apply operations research techniques to Urban Government decision making. The programme also includes a number of inter-disciplinary courses and of courses for architects primarily dealing with business and project planning.

General Interest Courses. Reference was made above to the wide ranging general interest programme and it is interesting to note the efforts which are being made to make it possible for the population, and women in particular, to attend these courses. Particular members of staff are concerned with week-end programmes and with day-time programmes, and the results of their efforts has been a big increase in the attendance at these times. To make it possible for women with children to attend, creche facilities are usually provided. The range of subjects of interest to women is a particularly notable feature of these programmes. One difficulty noted in the Annual Report is that of finance. Since non-credit programmes are required to produce about 70% of all costs (including overheads) from the fee income, this is felt to be a limiting factor and particularly hard on programmes of citizenship education. It is likely to result in some worth-while students being unable to attend courses and has already had the effect that courses cannot frequently be put on outside Greater Vancouver because of the difficulty of drawing suitable numbers to courses and hence of ensuring financial viability.

Continuing Education in the Health Sciences

The Division provides a service to, and is financed by, the Faculties of Medicine, Dentistry and Pharmaceutical Sciences together with the Schools of Nursing, Rehabilitation Medicine, Home Economics and Social Work. Each Faculty or School has a Director of Continuing Education who is a senior member of its own staff and collectively they form the administrating committee for this Division of Continuing Education in the Health Sciences with Mr. Ralph A. Barnard being the Executive Director. This provides a means for co-ordinating education programmes, for the development of inter-professional education and for providing common services in terms of publicity, advertising etc. They have also co-operated with the Department of Adult Education in the Faculty of Education in the development of programmes to prepare members of the health professions as specialists in continuing education. This has been done with the assistance of a grant from the W. K. Kellogg Foundation and enables students to study for a Diploma or Master's Degree in Education.

Individual Faculties and Schools will plan their own specific programmes in continuing education and may have internal committees for this purpose. In the case of the Faculty of Medicine the system is particularly well developed in co-operation with the B.C. Medical Association. There are

physicians in each community throughout the Province, elected by members of the Medical Association who are responsible for continuing education in their area. They will select the suitable courses and arrange programmes in co-operation with the Faculty at the University. ..

The Division of Continuing Education is housed in the Instructional Resources Centre. This fine building provides facilities for the initial training of undergraduate students in all the Faculties mentioned and the design was influenced by the concept of the health team approach to medical care and aims to get as much contact as possible between students of these different disciplines during their early years of study.

Commerce and Business Administration

The Faculty of Commerce and Business Administration has 1300 undergraduate students with 90 permanent members of the Faculty. There are 10,000 part-time students accounted for approximately as follows - Accountancy Diplomas 5,000, Real Estate Diplomas 4,000 and Others 1,000. In addition to this, the Faculty has recently started part-time Degrees in Commerce and is offering one course per year in the evenings so that students could ultimately qualify for the Bachelor's Degree by evening study. This is a repeat class of the one offered at normal times for the regular students. A similar arrangement of evening study is being operated for the first year of the MBA programme. Since these courses are for credit they are regarded as part of the Faculty teaching load.

The other part-time and continuation work is split into two sections, the Diploma Programme with Mr. David Elder as the Director and the Executive Programme with Dr. Chapman as the Director. The basic difference between the two sections is that the Diploma Programme is concerned with courses for the initial qualification of Accountants, Real Estate, Bankers etc., whereas the Executive Programme runs short seminars for up-dating people on latest techniques.

Diploma Program. Accountants are trained for one of two associations - the C.G.A. (Certified and General Accountants) and the R.I.A. (Registered Industrial Accountants). A student must register with his Association and pay them the fee which covers the course and also membership of the Association. The enrolments are notified by the Association to Mr. David Elder. Courses are then provided in the evenings to meet the requirements of the Association and for the normal student this will involve five years with two evenings spent on study. The fees for these courses are fairly appreciable being at the rate of $100 per subject which usually means $300 per year for the student. Teaching on these courses would be done by members of the permanent Faculty or by outside Accountants. In either case they would be paid a rate per hour of instruction plus an extra rate for each script marked. For these Accountancy bodies, the examinations are set and marked nationally with the results being notified to the student and to the Provincial Chapter of the Accountancy Body who will then confirm the student's formal qualification and permission to practise within the Province.

Other courses provided include those for Real Estate, for the Canadian Institute of Bankers (four year programme) and rather less demanding programmes such as that for the Junior Chamber of Commerce which has been going for the past 25 years and provides 3 year evening courses to give a general broad management background. There is also a Diploma in Sales and Marketing. Examinations for these latter courses are set by the University but the Diploma is given by the Association. All of these courses run individually since it is felt there are sufficient numbers on each to make them viable, and attempts to rationalize the subject content so as to standardize courses might cause adverse comment from the professional Associations, particularly the Accountants. Many entrants start from the level of 12th Grade in school; some with degrees will qualify for exemption from appropriate subjects but will need to pass the

professional examinations in the remaining subjects for their Diploma.

It seems that the demand for all these types of Diploma course is still increasing and that the advent of the nearby Simon Fraser University into the field of banking has not reduced the numbers at the University of British Columbia. Apparently Simon Fraser students take Degree courses and, if successful, can then be granted exemption from appropriate subjects of the Bankers' examinations.

Executive Program. This provides a number of short courses or seminars on current topics arranged on an individual basis which do not lead to any qualification. Speakers may be drawn from the Faculty or from elsewhere. Examples from the current series are:-

- Finance Fundamentals. Six consecutive Wednesday evenings 7 p.m. to 10 p.m. (alternatively six successive Saturday mornings from 9 a.m. to 12 noon). Sessions held on the U.B.C. Campus, fee $120 for six sessions, or $30 per session.

- Management and Organisational Behaviour. Film and seminar series. Six successive Mondays from 1.30 p.m. to 4 p.m. at the Hotel Vancouver, fee $90 or $20 per session. Discussion leaders all drawn from the Faculty of Commerce, U.B.C.

- Quantitative Techniques in Maintenance Management. Two day Workshop at the Hotel Vancouver taken by Professor Andrew Jardine, of the Department of Engineering Production, Birmingham University, on leave at the Faculty of Commerce, U.B.C., fee $150.

- Advising the Estate Owner in the Uncertain Economy. Six 3 hour Sessions on successive Thursday evenings followed by one afternoon resumé session by outside speakers from Canadian firms, fee $100.

- Professional Development for Municipal Administrators. Three and a half day working seminar at a local hotel, fee $225 including overnight accommodation, or $155 without.

Department of Adult Education, Faculty of Education

The University offered its first course in adult education in 1957 and became the first university in Canada to do so. The first Professor of Adult Education, Dr. Coolie Verner, was appointed in 1961 and this marked the formation of the Department and the full initiation of an on-going graduate programme.

Currently four professional degrees in adult education are available through the Faculty of Graduate Studies:- the Doctor of Education, the Master of Arts, the Master of Education and the Master of Science in Agriculture. The first three of these, together with the Diploma Program are described in the section 'The Training of Adult Educators'. Professor Dickinson, Chairman of the Department, also referred to the various short courses run in co-operation with the Centre for Continuing Education and the contribution made to professional adult education activities in the Province and elsewhere. The Department is also active in the research field and many studies have been published by faculty members and by students working for research degrees.

ii) SIMON FRASER UNIVERSITY, BURNABY, B.C.

Division of Continuing Education - Dean, J. Blaney, M.Ed., Ed.D.

The University was founded by an Act of the British Columbia Government following a review of higher education in January, 1963. It is sited on the top of Burnaby Mountain, east of Vancouver and is named after Simon Fraser the explorer. It has Faculties of Arts, Education, Inter-Disciplinary Studies and Science. Within the Faculty of Arts it is possible to study commerce in addition to the normal range of subjects. There is also a two year part-time degree for the M.B.A. The University operates the trimester system which divides the calendar year into three academic terms of about sixteen weeks each. A student may study for one, two or three terms in the year thus providing a flexibility of study pattern.

Dr. J. Blaney has recently been appointed Dean of Continuing Education. Currently the Division operates a system of evening classes after 4.30 p.m. each day, most of which are taught by Faculty on overload, and in addition, a range of non-credit general interest courses. There are plans to move towards the extended day system and, when implemented, this together with the trimester arrangement will offer a lot of flexibility from the point of view of part-time students. However, officially there is no designation of part-time student - all are students of the University but merely have differing course loads.

There is also a plan to appoint Assistant Deans responsible for continuing education in each of the Faculties and the Division of Continuing Education will then become a co-ordinating body with responsibility for providing central services and a spearhead for the development of continuing education.

Part-time degree students wishing to study in the main liberal arts areas can take the first two years of study at various Community Colleges within the Province and then complete the last two years at Simon Fraser University. It is planned, as far as possible, to provide facilities also for studying the last two years at locations other than S.F.U., by means of correspondence and block study periods with tutors travelling to the off-campus locations.

iii) UNIVERSITY OF VICTORIA

Division of Continuing Education - Director, L. E. Devlin, B.Ed., M.A., Ph.D.

Victoria College had historic origins, opening in 1903 as a college affiliated to McGill University in Montreal. It subsequently worked in co-operation with the University of British Columbia and was then made a University by Act of the B.C. Government in 1963. It has Faculties of Arts and Science, Education and Fine Arts.

Evening credit courses are provided by all Faculties and, in addition, courses of study for credit in Education are provided in the late afternoons. There is a non-credit general interest programme and courses take place on and off campus.

The Division also operates the French language Diploma programme for adults which involves a staff of four full-time members and two part-time. Developments are taking place in the providing of continuing education for nursing staff in co-operation with local hospitals.

While there has always been a strong tradition of continuing education ever since the start of the Evening Division in 1948, Dr. Devlin feels this is receiving impetus from a number of sources. The new University Act of the B.C. Government of June, 1974 spells out that continuing education is now one of the explicit duties of public universities in the Province. The University has given further consideration to continuing education and has established a Committee of Continuing Education of the Senate. As a result of these activities

the number of continuing education students has increased markedly during 1973/4 compared with the previous session - those taking evening courses for credit have more than doubled and more classes are provided off campus. In addition, the range of non-credit courses and the number of students attending have also increased and more classes are being provided off the campus.

iv) UNIVERSITY OF MANITOBA, WINNIPEG

Extension Division - Director, Professor A. W. R. Tweedie, C.D., M.A.

The Division now concentrates entirely on non-credit work. It was formerly responsible for the administration of the Summer Sessions which have an emphasis on credit courses for teachers but this has now been split off into a separate organisation. The evening programme for credit forms an extension of the normal day time programme and is dealt with by the same administration. The Division is organised into four main departments - management studies, professional studies, community studies and the evening institute.

The Department of Management Studies has the greatest number of courses, has a little under half of the total student registration and works in co-operation with the Faculty of Administrative Studies of the University. In concert with the Professional Accountants' Association of Manitoba, it has been concerned for some years with the design and presentation of continuing education programmes for professional accountants - the need to keep accountants up-to-date with taxation law has been a continuing thread through this. A number of courses related to finance, public administration, industrial relations etc. have also been developed. These courses have now been largely rationalised into certificates in topics such as Public Administration, Banking, Management and so on, each of which requires three or four years part-time study. A group of core subjects common to them all has been developed and various options are then provided which enable an appropriate slant to be given for each profession. Some short seminars are provided on current topics.

The Department of Professional Studies works in co-operation with faculties of the University such as those of Dentistry, Home Economics and Pharmacy and the School of Social Work to provide continuing education programmes for professionals engaged in each of these fields. A number of courses have also been provided for engineers in co-operation with the Engineering Institute of Canada. The community is showing increasing concern with questions such as ageing, women's subjects and native studies and developmental planning is going on in these areas. The Department envisages an increased demand for continuing education by a number of professions and refers to the dentists who will be required shortly to meet 'a learning quota' if they are to maintain their licences to practise. Similar developments are possible for other health professions.

The Department of Community Studies runs courses which are mainly off-campus out in the Province. The topics have ranged from a workshop for Community Development Officers to small business management and human survival in winter. They also have an interest in liberal courses and have co-operated with the Manitoba Holiday Festival of the Arts in Neepawa.

The Evening Institute provides a wide range of general interest programmes mainly on the campus. Courses for the learning of various foreign languages are included.

v) UNIVERSITY OF SASKATCHEWAN, SASKATOON

Extension Division - Director, Professor W. B. Whale, B.S.A., M.S.A., Ph.D.

Extension work in the Province of Sasketchewan had its origins in a Department of Extension which was introduced into the College of Agriculture in Saskatoon in 1910. This was concerned with agricultural field work at the local level throughout the Province and subsequently with activities related to the home and family, involving particularly women and youth, through the development of the Provincial 4-H Programme. Most of the field work in agriculture has since been taken over by the Sasketchewan Department of Agriculture though the University still retains links with this.

The present Division has developed considerably but it still reflects facets of its activities which go back to these earlier origins - in particular advanced programmes in agriculture and animal sciences (the Extension Division has a number of joint appointments with these academic faculties of the University) and also a very strong interest in the development of audio-visual methods as a means of taking instruction to distant parts of the Province. Continuing Education work has also been developed for many of the professions including teaching, business and engineering. A range of part-time degree programmes is offered with study being available in the evenings or, in some cases, during summer sessions, both on campus and off-campus. A range of general interest non-credit programmes is also provided in the areas of literature, fine and performing arts, and dealing with inter-cultural relationships.

The main organisation of the Division reflects some of the emphasis referred to above and it consists primarily of three departments - Program Development, Program Instruction and Administration. The Program Development Department conducts basic research and evaluation studies in educational projects, prepares and tests learning packages, and provides assistance to other continuing education agencies. The Program Instruction Department is primarily responsible for identifying the educational needs of the Saskatchewan public and developing appropriate programmes to meet them. The Administration Department, in addition to providing internal support services to the Division, is concerned with the work of Provincial Agencies involved in public education including the Horticultural and Agricultural Societies, Women's Institutes and the 4-H Programme.

The incentive for the development of non-traditional methods of learning arises from the dispersed nature of population within the Province, and has produced some interesting results. The first stage involved the provision of support materials for instructors and the training of them in instructional skills. This included the development of tape-slide and other types of material which are packaged and available to trainers in the Province. A further stage of development entailed the preparation of complete self-learning packages which an individual could use without the assistance of an instructor. This still requires more development work and monitoring of the results to check its effectiveness. In both cases the mechanisms used have included video tape cassettes, audio tape cassettes, tape-slide presentations, film strips and printed materials. An interesting innovation pioneered by the Extension Division involves tape-slide packages using three projectors electronically synchronised with the audio tape which controls them. This has been particularly useful in dealing with complex subjects and concepts which have to be explained since slides can be projected side by side for comparison or contrast. The Division has produced its own small portable programmer-playback unit.

In order to gain the co-operation of Academic Faculty within the University members of the Extension Division are each responsible for a specialised subject

area and for programming courses within that area - namely, Agricultural Science, Business and Industry, Home and Family, Leadership Development, Liberal Studies, Social and Economic Development. In addition, the Faculty Council has a Committee on Extension which is advisory to the Extension Division.

Continuing Medical Education Division

This is part of the Faculty of Medicine and organises refresher courses and regional conferences and also issues publications to assist with keeping physicians in touch with the relevant new developments in medicine. In addition, interesting use was made of educational technology in the 'Dial Access' system which was of particular benefit to physicians widely dispersed in a large province. Dial Access is a tape library service which can be used, free of charge, 24 hours a day by all physicians in Saskatchewan. Over 500 messages, each of about 5 minutes duration, can be selected to give concise information about specific problems or emergency conditions affecting patients. The system has operated very satisfactorily for over 4 years.

College of Education

A program of graduate study in continuing education is provided under the guidance of an inter-faculty committee which includes members from the College of Education, the Extension Division and other faculties. This is described in the section on The Training of Adult Educators. Between 100 and 150 students are normally registered for full-time or part-time classes and the writer was invited to give a seminar on Adult Education in Britain to one evening class.

vi) UNIVERSITY OF CALGARY

Division of Continuing Education - Director, F. Terentiuk, B.Sc., M.A., Ph.D.

The Division is planned on a comprehensive basis covering the Extension Program (courses which do not qualify for degree credit); the Evening Credit Program; the Spring Session which runs from mid-May until the end of June and the Summer Session running from the beginning of July to mid-August.

Dr. Terentiuk feels it important for the Division to have a comprehensive programme since this assists acceptance by the academic departments, avoids competition between different types of course for the services of staff in the faculties and also helps to blur the boundary between credit and non-credit work which he feels is a desirable aim.

All types of programme mentioned above are dealt with by twelve full-time academic staff in the Continuing Education Division and are sub-divided into the following sections: Engineering and Geology; Science and Mathematics; Fine Arts; Business; Women's Programmes; Social Welfare and Community Work; Humanities and Education. In each case there is a liaison person appointed in the appropriate academic department who assists in maintaining contacts with the Division and helps the staff member in Continuing Education to identify appropriate lecturers for courses. The academic departments are consulted on most courses which are run and these may be publicised jointly from the academic department and the Division of Continuing Education. A few appointments are made jointly between the Division and an academic department but, in these cases, it would be usual for two thirds of the time and salary to be provided by Continuing Education.

The Extension non-credit program covers a large range of subjects, both professional and general interest. The nature of these is indicated by the sections into which the staff are divided as given above. In the case of

professional programmes these are frequently organised in co-operation with the appropriate professional organisation within the Province - examples of this in the case of Business are: The Institute of Canadian Bankers' Fellows' Program and the Real Estate Certificate Program. One interesting course offered is the Certificate Program in Management Development which normally takes three years part-time study. A total of six subjects is required which can be taken at the rate of two subjects per year, each involving the equivalent of 25 two hour sessions offered once a week during the winter. The compulsory courses are four, comprising Business Organisation Administration, Canadian Economic Development, Financial Accounting and Management Accounting. Two additional optional courses are required for the Certificate and the selection of these can bias the course towards General Business Management or Personnel Administration. The same classes also provide the basis for the courses in Banking and Real Estate mentioned above.

The Evening Credit Program is being modified to become part of the Day Program for undergraduate students by extending the hours over which courses are time-tabled, i.e. including the evenings as well as day time for both full-time undergraduates and the part-time students. From the point of view of staff in the Faculty, teaching in the evening is being included as part of the normal teaching load, with the necessary adjustment to the number of staff required, and is not now being treated as 'overload'.

The Spring and Summer Session have been catering mainly for teachers who wish to upgrade their present qualification into a full degree which is now the mandatory teaching qualification required by the Province of Alberta. However, there has been an increased attendance in recent years by those studying commercial subjects.

An interesting though less usual inclusion in the Division is the Conference Section concerned with the planning, publicising and administration of conferences run by the Division, by other sections of the University and by outside organisations. The staff of three is financed from per capita fee charged for the service.

vii) THE BANFF CENTRE, BANFF, ALBERTA

Director, D. S. R. Leighton, M.B.A., D.B.A.

The Centre is beautifully situated near the town of Banff in the Rockies. It has a fully equipped theatre, lecture theatres and tutorial rooms and can accommodate and feed up to 800 people in single and shared rooms. The Centre serves three functions - the School of Fine Arts, the School of Management Studies and as a Conference Centre which is available for hire to organisations running their own activities.

The School of Fine Arts has become one of North America's foremost schools of music, painting, drama, ballet, photography, figure skating, French, writing and crafts. The Summer Festival has two six week sessions and draws young performers from across Canada. Some scholarships are provided and selection for these takes place throughout the year. The finale is a series of public performances during the first two weeks of August which coincides with the peak tourist season in Banff and very high standards are attained in all fields.

The School of Management Studies runs two advanced management programmes per year. Each lasts six weeks, caters for about 100 students drawn from senior management in industry and the public services. It covers three major areas - management of the enterprise, financial management, and the business environment. In addition a range of short residential courses is run on current management topics.

viii) UNIVERSITY OF TORONTO

School of Continuing Studies - Director, E. M. Gruetzner, M.A.

The former Division of University Extension has recently been split into a School of Continuing Studies which deals with all programmes not leading to a qualification and Woodsworth College, which deals with all part-time studies leading to a Degree, Diploma or Certificate (this is described below). The School provides a wide range of topics in the general interest area and also has special programmes dealing with French language and English as a second language. Particular discussions took place with Mr. Gruetzner, with Mr. M. R. Hecht who deals with the business courses and also with Mr. H. L. Mills who deals with the independent study or correspondence courses.

Mr. Hecht is cross-appointed between the School and the Management Department. This arrangement works well and has helped to assist in the co-ordination of continuing education programmes between Continuing Studies and the Management Department. The latter deals with the executive programme while Continuing Studies deals with other types of short courses in the management area. He keeps in close touch with local business to know their requirements and also with the Institutes of Bankers, Accountants and other bodies who have concern about training of entrants to their profession. Thus he is able to co-ordinate his expertise on the marketing of courses, both on account of Continuing Studies and also the Management Department.

Mr. Mills operates the correspondence courses and part of his activity complements that of Mr. Hecht since some of the correspondence courses deal with subjects in the area of management and business and a few in the field of engineering. The offerings have been rationalised and, from the subjects available, correspondence courses are made up to suit the requirements of the Banking, Engineering, Accounting and other Institutes. These Institutes also assist with publicising the availability of these correspondence courses to their members.

Development work is going on with the use of cassette tapes and records to supplement the correspondence work and these media are used at the discretion of the tutor. The numbers taking a course at any one time may vary from about three to about thirty. Courses are reviewed periodically and a fee would be paid to a member of Faculty for planning and writing a course - many senior Faculty members are keen to co-operate in this type of work.

Faculty of Applied Science and Engineering

Some of the continuing education work is carried out by the professional faculties and two interesting activities emerged when talking to a senior Professor in the Faculty of Applied Science and Engineering. Firstly the Faculty has operated closed courses for senior executives of the Canadian General Electric Company to enable senior and middle managers to become conversant with modern aspects of mathematics so that in this area they can put themselves on a similar level of knowledge to their younger staff who qualified more recently. The second activity was the operation of a programme for the Master of Engineering Degree jointly between the Faculty and Seneca College in Toronto. The Degree is intended for those who wish to pursue advanced study suited for professional practice in engineering as opposed to the M.Sc. Degree which has more of a research orientation. The M.Eng. Degree normally requires the completion of eight one term courses and a project, all of which can be done by the student while in full-time employment - the courses are available in the evening and the project can normally be pursued on industrial or Government premises.

A maximum period of four calendar years is allowed for the completion of the Degree after first registration. Students may register in the Department

of Industrial Engineering, Mechanical Engineering, or Metallurgy and Materials Science. Some of the courses available are:-

Operations Research and Management Science
Manufacturing Processes, Machine Tools, Numerical Control
Plant Lay-out and Materials Handling
Design and Production
Theory of Metal forming Processes
Engineering Analysis
Metallurgy of Manufacturing Processes
Production Inventory Control
Plastics and Composites
Design of the Work Place
Quality Control.

Woodsworth College - Registrar, A. R. Waugh, M.A.

As explained above Woodsworth College has been formed recently and has taken over the part-time studies for degrees formerly conducted by the Division of University Extension. The number of people following part-time courses leading to a qualification is impressive - approximately 14,000 people take about 17,000 courses each year of which 10,000 occur during the winter, 7,000 during the summer sessions. There is a main emphasis on Arts and Science and, so far, about 45% of the students have been teachers but this category of student is tending to reduce.

Approximately 30 students a year take courses in Engineering but they can only take the first one or two years by part-time study and then must complete the requirements for a degree in residence. A similar arrangement applies to about 60 who are enrolled for Nursing Degrees - many of these wish to convert their present diploma into a degree qualification. The courses are the same as those available to full-time students and the lecturers are frequently the same. Some of these are engaged on an overload basis while a few are cross-appointed between Woodsworth College and one of the academic departments. In this case a normal arrangement would be that Woodsworth College had half a faculty member's teaching time and would pay a third of his salary - the difference being the 'research element' which would be available to the academic department. This arrangement gives Woodsworth College some guaranteed faculty members available for its courses and is welcomed by some teaching departments as a contribution to their operating costs and, in a few cases, helps to offset the drop in undergraduate numbers which may have occurred in recent years.

ix) YORK UNIVERSITY, TORONTO

The University was founded in 1959 initially as an affiliate of the University of Toronto but it became independent by mutual consent in 1965. It has 23,000 full and part-time students with Faculties of Arts, Science, Administrative Studies, Environmental Studies, Fine Arts, Education, as well as the Osgoode Hall Law School and a Faculty of Graduate Studies. The main York Campus is in the north-west corner of Metropolitan Toronto and the Glendon Campus is near the centre of the City of Toronto. Its Centre for Continuing Education has three sections dealing with education, management and organisation development, human relations and social development.

Evening and summer session credit courses are organised by Atkinson College, a constituent part of the University which is referred to below.

My host was Mr. Lloyd Duncan, Chairman of Studies in Education who was

cross-appointed between the Faculty of Education and the Centre with each having responsibility for 50% of his salary. He felt that this arrangement worked very well.

Atkinson College

Atkinson College is the evening faculty of York University offering undergraduate arts and science courses leading to four degrees - Bachelor of Arts, Bachelor of Science, Bachelor of Arts (Administration) and Bachelor of Social Work. Less usual subjects included in their degree programme are Administrative Studies, Canadian Studies, Fine Arts, Humanities, Social Science, Social Work and Urban Studies. In addition to evening courses the College offers day-time courses during the summer. The College was started in 1962 and has separate academic staff and administration from York University of which it is a component part. My host, Mrs. Margaret Knittl had just been elected Dean of Atkinson College and was very much in favour of its type of organisation. She felt that the staff and administration could provide the special type of provision needed for evening students and hence that they would not feel that they were inferior to full-time students. She felt that the staff were of good calibre and that many of them preferred doing their classes in the evening which left the day-time free for research and other activities.

x) ONTARIO INSTITUTE FOR STUDIES IN EDUCATION, TORONTO

Department of Adult Education - Chairman, Professor A. M. Thomas, M.A., Ph.D.

Adult Education is one of ten Departments contained within the Institute which is an independent organisation, though linked with the University of Toronto for administration and with its Graduate School in connection with higher degrees in education. The Department runs courses during the winter and spring semesters (thirteen weeks each) and intensive six week courses during the summer session. These form some of the graduate courses in Education available through the Faculty of Graduate Studies of the University. One interesting course, which is not recognised by the Graduate School, is a Certificate course in Adult Education for Instructors in Community and Vocational Colleges who have good experience of teaching and of their subject but who may not have a very strong initial qualification.

The Department is the main centre in Canada concerned with the encouragement and propagation of research in Adult Education. Discussions with members of the staff, and in particular with Dr. Alan Thomas and Dr. Roby Kidd, proved to be most useful in highlighting developments in different Provinces which it was possible to follow up subsequently during the tour.

xi) McGILL UNIVERSITY, MONTREAL

Centre for Continuing Education - Director, J. A. Duff, B.A., M.A., C.A.

The Centre is organised into a number of subject groups with a member of staff responsible in each area. Assistant Directors are in charge of Management - graduate and professional development programmes; Management - undergraduate and certificate programmes; Education; and Languages. In addition, Program Co-ordinators are responsible for Community Services, Liberal Arts, and Engineering courses. The Centre deals with courses both for credit and not for credit but a separate organisation runs the Summer Session which covers a range of general educational and professional subjects including some courses in management, but few in engineering.

The opportunity was taken of exploring their activities in the field of management with my host Mr. W. H. Ellis, one of the Assistant Directors, and, as can be seen above, this is subdivided into graduate and undergraduate levels. The graduate section has the largest recruitment of any in the Centre and its main activity centres on the Diploma in Management. The student is required to complete one subject out of each of the five groups constituting the core courses which are broadly in the following areas - mathematics and statistics, accounting, economics, behavioural science and data processing. A range of elective subjects enables a student to satisfy his own personal requirements or to gain a specialist diploma, for example, by taking one selection he may gain exemption from the Diploma of the Chartered Accountants of Quebec and, by another selection, he may qualify for the McGill Diploma in Management (Tourism). In addition it is possible for a student who successfully completes this Diploma in Management to have it accepted in lieu of the first year of the M.B.A. programme. To complete this degree qualification, he would need to transfer for the second year part-time evening study to the Department of Management in the University. It is interesting to note that for the Diploma a student would pay fees at the rate of $85 per course whereas, if accepted for the M.B.A., the fees are reduced to $57 per course due to the method of financing by the Quebec Government, which favours courses for degree credit.

There is, in Montreal, an Executive Development Institute which was set up by the local Board of Trade before McGill University started providing instruction in the management field. This Institute still continues and is controlled by a Board of Directors which includes local business executives together with members of the Management Faculty of McGill and Mr. Ellis, who functions as the course director. This Institute now provides an executive development course, advance management course, and other courses dealing with particular aspects of management. In addition it offers a number of two day seminars each year.

Mr. Ellis is the Assistant Director responsible for graduate management courses and holds a joint appointment between the Centre for Continuing Education and the Faculty of Management where he teaches courses in marketing, management of small business, and tourism. He finds that this joint appointment works well and enables him to have status within the Management Faculty and also assist in co-ordinating their activities with those of the Centre.

The undergraduate management section operates a Bachelor of Commerce Degree programme which part-time students can study in the evenings and, in addition, a series of certificates in management each of which require the student to complete about eight major subjects. These are specialised into areas such as administration, real estate, banking, insurance, marketing, systems design and transportation management. In many cases the professional institution covering each of these areas accepts this certificate in satisfaction of their examination requirement for membership.

xii) UNIVERSITÉ DE MONTRÉAL

Service d'Éducation Permanente - Directeur, Professor G. Daoust, LPh, DPh, DTh.

The Université is one of the major universities in the French culture of Quebec dedicated to the furtherance of this culture and to the training of professional students of all types. All instruction is given in French. It has about 20,000 full-time students and about 8,000 part-time students on the books. My host, Dr. Charles Widmer, explained that the University has operated an extension service since 1952, but in 1969 this became the Service d'Éducation Permanente, with the wider connotations implicit in this title. It regards its objectives as putting the resources of the University at the service of the adult population and also of providing 'education permanente'. Towards this latter aim, it operates a research section which is concerned with the systematic analysis of the needs of adults, the development of instructional methods and the evaluation of the results of the work which the service does. It provides credit courses which can lead to degrees and certificates by part-time study and also a range of non-credit activities, some of which take place off the campus. It is also experimenting with the use of T.V. linked with correspondence work for instructional purposes.

xiii) SIR GEORGE WILLIAMS UNIVERSITY, MONTREAL

Sir George Williams has a long background tradition for the provision of evening and part-time study in Montreal and these activities continue alongside the education of full-time students with all the administration being dealt with centrally and the instruction being arranged by the academic departments. Individual departments also provide summer session instruction which they publicise and organise individually.

Continuing Education Division is headed by Mr. James McBride but, as he was away on vacation, discussions were held with Mr. James H. Whitelaw, M.A., Associate Vice Rector for Academic Planning. The Continuing Education Division has three sections - Business and Administration, Teacher Training and Certification, and Continuing Education Music Programmes. The Business and Administration Section runs a series of executive development seminars and also the Diploma in Institutional Administration. It is interesting that the University is developing off campus credit courses in co-operation with various School Boards so that there can be the possibilities of taking courses other than in downtown Montreal. The Continuing Education Division has the responsibility for publicising and organising these courses and, in addition, a variety of non-credit general interest courses which are provided both on and off campus.

UNIVERSITIES VISITED IN THE UNITED STATES OF AMERICA

Brief notes on the universities visited in the United States are given in this appendix since they form an addendum to the main theme of continuing education in Canadian universities. Two series of visits were made - firstly, to a number of institutions in the Boston area of Massachusetts and to the University of New Hampshire on the eastern side; secondly to universities in the west coast States of Washington, Oregon and northern California.

Though this is only a small part of the United States, the institutions visited displayed a wide variety of approaches to continuing education against different backgrounds - from the more densely populated areas such as Boston and San Francisco with large scale extension activities to the more rural areas of Oregon with its State University Extension Service. All of this provided a further dimension to the theme of continuing education.

i) NORTHEASTERN UNIVERSITY, BOSTON

Northeastern University founded in 1898, states that 'its dominant purpose is to identify community needs and to meet these in distinctive and serviceable ways'. This is reflected in the nature of its courses, in the large provision made for part-time study including up-dating courses and in the 'Co-operative Plan'. The plan involves study programmes in which students alternate periods of work and study - it thus has some similarities with 'sandwich courses' in Britain. Northeastern was one of the initial 'co-op' universities in the United States originating the programme in engineering in 1909. Co-op courses are now offered in most subjects, both at undergraduate and graduate levels, and Northeastern is the largest university operating on this plan in the United States with about 9,500 students being counselled and placed in work situations each year.

The University has 40,000 students in total of which 15,000 are regular day students and 25,000 are enrolled on graduate, part-time or evening courses. The regular bachelor's programmes are provided by eight Colleges - Business Administration, Criminal Justice, Education, Engineering, Liberal Arts, Nursing, Pharmacy and Allied Health Professions and Boston-Bouvé (physical education, recreation education, health education and physical therapy). Advanced study takes place in nine Graduate Schools - most of which parallel the undergraduate colleges. In a number of Colleges and Schools provision is also made for part-time students - for example, a bachelor's degree in engineering can be obtained after eight years part-time study and a master's degree usually in about four years - the periods being reduced in both cases if the candidate already possesses acceptable credits towards the degree. All courses operate on the 'Quarter' system i.e. the year comprises four Quarters of 12 weeks each.

The provision for other part-time and up-dating courses is mainly organised through other units of the University referred to below.

Lincoln College - Dean W. F. King, B.S., M.S., P.E.

This offers engineering technology programmes leading to the Associate in Engineering, Associate in Science and the Bachelor of Engineering Technology degrees - in the British system these would tend to equate with qualifications for Technicians and Higher Technicians. The majority of courses are only available for part-time study, mainly in the evenings. The Associate can be taken in a wide range of technical and scientific areas and would require four years part-time study. The Bachelor of Engineering Technology can be granted in Civil, Mechanical or Electrical Engineering and requires eight years part-time study though a four year co-operative programme is also available in the latter two branches of engineering. Part-time students would take three or four subjects per year and the fee per subject would vary with the number of

credits granted at a rate of $29 per credit hour per Quarter. This is likely to aggregate to about $700 per year.

Lincoln College draws most of its instructors from the Colleges of the University, other academic institutions and from industry. A course consultant is appointed from the Engineering Faculty to plan and design each course - both the consultant and the instructors are paid extra for their work. These costs plus overheads are met from fee income.

Some courses are run on subsidiary campuses in the Greater Boston area though the majority take place on the main campus.

University College - Dean K. W. Ballou, A.B., Ed.M. (also Dean of Adult Education)

Organisationally, University College is broadly similar to Lincoln College and deals with part-time day and evening undergraduate programmes in business administration, health professions, law enforcement, liberal arts, education and therapeutic recreation services - a total of 39 fields of study. Students may take single courses or register for the Associate in Science (usually four years part-time study, equivalent to a two-year regular programme) or the Bachelor of Science (usually up to eight years part-time study and equivalent to the conventional four year full-time programme). Some courses are offered on the suburban campuses.

The part-time teaching staff numbers about 800 and is drawn from the other Colleges of Northeastern, educational institutions in New England and the business and professional communities. Rates of student fees are assessed on the same basis as Lincoln College - currently $29 per credit hour per Quarter (12 weeks).

Center for Continuing Education - Dean I. Katz, BSME, MME.

The Center was established to relate the University to the needs of its community, recognising that the rate of change in all aspects of life is increasing. It provides

- educational programmes and workshops tailored to an organisation's specific needs
- courses to meet educational needs not presently served by degree-granting programmes
- consulting services in areas of special educational interest or concern.

The motivation for the Center is indicated by a quotation from one of their publicity leaflets -

> "The focus is on creative problem-solving, both short- and long-range, and on the managing of changes affecting business, the professions, and society. All programs are action-oriented, designed to relate theory to practice and to meet the immediate, practical needs of the businessman, engineer, scientist, or technician. The pay-off comes in more effective on-the-job performance."

The Center has an organising and administrative staff but draws on educational resources to achieve the desired aims of each programme from the University, other academic institutions and particularly from industry and commerce. Courses may take place in Henderson House (the University's residential conference centre), on the campus or on the premises of a client organisation.

One activity run by the Center is the 'State of the Arts Program'. This provides a range of up-dating courses in specialist areas such as systems theory and engineering; applied sciences; materials science; computation; electrical,

mechanical and industrial engineering; management; biomedical science and engineering; food technology; occupational health and safety; building technology. A typical course (Data Communications Systems) might involve one evening per week for twelve weeks at a fee of about $150, with instructors from a local industrial firm. Students enrol for individual courses but those with a suitable bachelor's degree who undertake a coherent programme of continuing studies in engineering and associated fields can qualify for a Certificate. This requires the accumulation of 20 Professional Credits within a seven year period - credits are awarded according to the length and nature of the course taken, for example the typical course mentioned above carries two and one-half Professional Credits.

Parallel series of courses and seminars deal with organisational problems (some being oriented towards small businesses) and with the effects of social changes on work patterns and on the conduct of business.

ii) BOSTON UNIVERSITY

Metropolitan College - Dean H. S. Gibbs, M.A., Ph.D.

Metropolitan College is one of the constituent colleges of the University, founded in 1965, to serve the needs of adults from Metropolitan Boston who are unable to attend classes on a full-time basis during the day and is specifically organised to meet their requirements. The range of subjects includes liberal arts, business and related studies, and some types of professional training. The College awards both graduate and undergraduate degrees or alternatively students may take courses with the aim of transferring the credits elsewhere or purely for their own interest.

The College operates an open admissions policy for initial courses to any student who has completed a secondary school education, though all students must have a counselling interview. If performance is satisfactory in the first 3 or 4 courses, the student can continue to complete the 32 courses required for an undergraduate degree. Most advanced courses have pre-requisites. Classes are scheduled in the late afternoon and evening though a recent innovation has been early morning classes - the 'early bird' schedule. The fee for a course is about $200.

Summer Term

The University also operates a Summer Term starting in early June which comprises two six-week sessions. Study during the twelve weeks can be equivalent to that during a normal semester of about 16 weeks and most of the regular courses are repeated during the Summer Term, thus students can shorten the overall period of study for a degree. In addition, special courses are provided for teachers and other professional groups. The same basis of open admission applies as in the case of Metropolitan College. The fee for a course varies between approximately $195 and $260.

iii) HARVARD UNIVERSITY, CAMBRIDGE

Commission on Extension Courses - Director R. H. Phelps, Ph.D.

Though based in Harvard University, the Commission, which was founded in 1910, draws its instructors from the members of the seven colleges and universities in the Boston area which belong to it - in addition to Harvard, these include Boston University and M.I.T. About 6,000 students register each year for approximately 9,000 courses - over half take the courses purely for interest and without aiming for a qualification and this is said to be a higher proportion of non-credit students than in most other institutions. Those who do register for credit can be candidates for the degree of Bachelor of Arts in Extension Studies (requires the satisfactory passing of 16 specified courses - the equivalent of a four year college programme) or the Associate in Arts in Extension Studies (8 specified courses, equivalent to two years college work). More than 80 students receive a degree in this way each year.

Over 30 subjects are included in the annual programme, some with six or more courses covering different aspects and levels of the subject. Most are scheduled during the evenings or late afternoons, meeting weekly during the academic year from September to May or, alternatively, during one of the two terms - Fall or Spring.

Some four or five courses are also offered on television each term and students following these may also register for credit, though attendance at some classroom sessions is required, as well as the completion of course work and the passing of the examinations.

The fee charged for each course (including television courses) is currently $20-$30 non-credit and $30-$60 for credit students, including registration and possible laboratory fees. This is appreciably less than fees for similar courses elsewhere (frequently $200 or more per course) and arises because of the subsidy from the Lowell Institute. The interesting historical derivation of fees comes from the will of John Lowell Jr. in 1836 which stated that students in 'more erudite and particular courses' might pay 'the value of two bushels of wheat' - this is now apparently interpreted as $5 with additional amounts being payable for items such as registration.

Harvard Summer School

This runs from early July to mid-August and offers a wide range of subjects, mainly for credit. The Summer School does not award degrees but offers the possibility to Harvard students and others of supplementing or speeding up their regular studies - these opportunities are advocated for those taking the degrees in Extension Studies through the Commission referred to above. About 4,000 students attend the Summer School each year for this purpose. The fee for a typical course is $290 and most students are limited to two courses.

In addition, some 1,000 people attend non-credit courses or the Special Programs associated with the School - these cover various topics and are of differing durations.

iv) MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE

Summer Session

During the Summer Session, a selection of the subjects available during the academic year is offered, as well as a few subjects designed for special interests and needs. These enable students from M.I.T. and other universities to advance their undergraduate or graduate studies. Most are formal courses but some enable a student to do research under supervision and the same entry standards apply as for the normal sessions. The fee varies with the course, from $220 upwards.

Special Summer Programs are also arranged for short intensive periods dealing with scientific, technical and management subjects of interest to those in the industrial and academic communities.

Center for Advanced Engineering Study

The Center has developed a number of self-study subjects for use by practising engineers and scientists as well as by academics and students. The main components are a series of lectures on film or tape, a study guide and a textbook. Some eleven subjects are currently available including topics such as Calculus Revisited, Probability, Economics, Modern Control Theory, Non-linear Vibrations, Colloid and Surface Chemistry, and Friction, Wear and Lubrication.

The Lowell Institute School

The School was established at M.I.T. in 1903 to provide evening instruction in technical subjects for residents of the Boston area. Today it tends to concentrate on courses for practising technicians on aspects of modern technology which are not readily available at other evening institutions. Emphasis is put on practical aspects and the development of experimental techniques, with sufficient theory to aid understanding.

Courses are scheduled for one or two evenings per week, for one or both of the academic terms. Some examples are Principles of Metal Joining, High Speed Strobe Photography, Optical Systems Technology and Introduction to Fortran Programming. Fees for these courses are from $75 to $100 plus materials and laboratory fees but, if assistance is not forthcoming from the employer, these are likely to be reduced (possibly to one fifth of the above amounts) due to financial assistance from the Lowell Institute.

v) LOWELL TECHNOLOGICAL INSTITUTE, LOWELL

Lowell, situated some 25 miles north of Boston on the Merrimack River in Massachusetts, was initially a textile centre but its range of industry has diversified during more recent times. Alongside this, the Textile School opened in 1897 has developed into the Lowell Technological Institute which grants associate, bachelor and master's degrees in various branches of science, technology, business and management.

The Evening School offers courses leading to associate degrees in four years and bachelor's degrees in seven years. This would involve attending courses for three evenings per week during each of two semesters (15 weeks each) and a fee of $90 per semester. There are two six-week Summer Sessions during which similar subjects can be taken on an intensive day-time basis with study during one session giving equal credit to one semester of evening study.

In addition there is a Continuing Education programme which includes workshops on specialist topics, professional retraining and general educational courses.

vi) UNIVERSITY OF NEW HAMPSHIRE, DURHAM

Division of Continuing Education - Director E. J. Durrall, Ed.D.

The University is situated on a beautiful campus at Durham, New Hampshire, some 60 miles north of Boston. The Division of Continuing Education has about 10,000 registrations per year for credit courses and 2,000 for non-credit courses. In addition there are about 10,000 attendances at conferences and institutes of varying lengths held during the year; these are organised by staff of the Division and members of the academic faculty make some contribution to the majority of them. Courses are offered throughout the year as part of an 'extended day' system from 8 a.m. to 10 p.m. as well as during the Summer Sessions which run from early June to the end of August. The total activity of the Division is expected to be financed from fee income.

Most courses in the Summer Sessions are for credit and the range covers most subjects studied in the University; individual courses are planned during the daytime or during the evenings over a period of four or eight weeks. The fee for a typical non-advanced course is $100 for a resident of New Hampshire and $140 for a non-resident. A number of Special Programs are also included, which do not necessarily qualify for credit, and interesting examples from the 1974 programme are - the seven week German Summer School run on the campus in co-operation with the Goethe Institute of Munich, when students live together, studying and speaking German continuously; Modern Greek Studies; The Polar Environment; and the Repair and Maintenance of Stringed Instruments, with a visiting tutor from Germany. In addition to studying, Summer Session students can also enjoy the excellent natural facilities and scenery of the area as well as the opportunities for recreation on the campus.

The New England Center for Continuing Education

This Center is a co-operative venture by the region's six State Universities, built with the help of grants from the W. K. Kellogg Foundation on a ten-acre site adjacent to the University of New Hampshire - one of the sponsors. Opened in October 1969, it contains the Kellogg Learning Center with dining and conference rooms for up to 280 people, the Adams Residential Tower housing up to 80 guests in rooms with private facilities and the Administration Building housing the Center's education and planning staff. First preference for bookings is given to educational programmes of regional groups, second preference to statewide organisations and other programmes are third priority.

The educational staff of the Center can assist with the planning and running of Conferences, while the technical staff can provide a back-up service using the very wide range of audio-visual and rapid printing services installed in the Center, which are reputed to constitute one of the foremost conference information systems in the country. These services are very sophisticated, including, for example, remotely controlled TV cameras and microphones in each conference room which enable proceedings to be transmitted elsewhere in the Center or recorded on tape, which can be recalled subsequently by a participant in his room in the Residential Tower.

Fees are payable to the Center for the use of conference rooms, meals and residence as well as for the administrative and technical services required. The aim is for the Center to be financially viable from the fees received for conferences run throughout the year.

vii) UNIVERSITY OF WASHINGTON, SEATTLE

Dean of Continuing Education - L. W. Schram, LL.M., Ph.D.

The University provides a wide ranging programme using not only traditional courses and seminars but also television, radio and correspondence. It is felt that there is an obligation to provide all types of continuing education for people in the State and the academic faculty is reported as supporting this strongly. Successful teaching on continuing education courses is one of the criteria used in assessing tenure or promotion. The State provides some financial assistance towards continuing education.

The organisational pattern is somewhat different from that in most universities visited, in that the Dean of Continuing Education and his staff are concerned, in some measure, with co-ordinating the work of the different faculties in continuing education rather than with the initiation of activities. There is an Assistant Dean in most faculties with responsibility for continuing education and he has a functional link with the Dean of Continuing Education who is responsible to the President and is also a member of the Board of Deans. There is a President's Committee on Continuing Education to advise on overall policy. Nevertheless, because of the range of activities, the number of staff responsible to the Dean of Continuing Education is appreciable. The organisation is functional rather than subject based and the main groupings are as follows:-

Division of Evening and Extension Credit Programs

- includes all courses involving credit (residence credit or extension credit) and independent or correspondence study.

Division of Extension Services

- includes non-credit programs, short courses, conferences, lectures, concerts, radio broadcasts and telecourses.

Division of Community and Organisation Development

- includes educational services throughout the State and continuing education in the arts.

In addition there are other sections dealing with Women's Programs, Community Relations (identification of needs and publicity), Staff Development, Operations and Management Services.

'Spectrum' is a 24-page newspaper issued free each quarter which gives information about the wide range of courses and activities for the following three months. Non-credit studies include lecture-discussion series, day-time and evening courses, physical education classes and classes for young people. In the September 1974 edition of 'Spectrum' there are five lecture-discussion series listed:- The Writer as a Political Force in Russia; Oil - Heritage and Headache for Man; Technology and Issues of Public Choice; Pediatrics in Transition - Progress and Problems; Primitive Art Forms and the 20th Century Western Arts. Each series has eight evening sessions at weekly intervals with a different lecturer on each occasion and the fee is $15. Classes for extension credit cover many subjects and fees for 21 sessions of 1½ hours vary from about $45 to $75 (i.e. $15 per credit) with additional fees payable for registration ($3) and car parking ($6.60).

At the University of Washington, there are two types of credit - residence credit and extension credit. Residence credit is associated with the regular programme and requires formal admission to the University. Extension credit can be earned on some continuing education and correspondence courses and does not require formal admission to the University. Subject to the regulations, it may be applied towards a bachelor's degree in some subjects and it is possible to get the degree by working part-time for about six years and including some evening classes for which residence credit is given.

The Telecourses are arranged in co-operation with KCTS (Channel 9) which has its studios on the campus. Two courses were being offered in Autumn 1974 - Making it Count: Computers and their Applications, and Children in Crisis - each could be taken for three extension credits on the following basis for a fee of $45. The student is required to watch 20 half-hour broadcasts, to study the specified texts and the study guide, to submit the study assignments or a research paper and to pass a supervised final examination. This examination takes place on the campus, as well as an optional Saturday morning seminar with the tutors held about the middle of the course.

Independent Study or Correspondence Courses are available in 24 academic fields mainly in the Humanities, Social Sciences and Natural Sciences but including some in Business Administration and Education. Most courses are written by the faculty member who takes the similar course in the regular programme. Students can register at any time during the year and proceed through the course at their own pace. Courses range from 2 to 6 credits (at the same fee as other courses - $15 per credit) and these can contribute towards a degree.

A special example of an independent study course is the 'Course by Newspaper - In Search of the American Dream'. This is a 3-credit course developed by the University of California at San Diego with a grant from the National Endowment for the Humanities and comprises several elements. Eighteen lectures by distinguished national scholars are published at weekly intervals in local newspapers and students are provided with additional instructional materials including a study guide. They are required to attend two lecture-discussion sessions on Saturdays and, at these, to pass the mid-term and final examinations in order to qualify for credit. In Seattle, these sessions are taken by faculty members of the University of Washington on the campus. (The scheme was also operating with Boston and Northeastern Universities).

Lake Wilderness Continuing Education Center belongs to the University and provides facilities for continuing education programmes sponsored by the University or by other state, federal or educational institutions. Situated on the shore of Lake Wilderness some 30 miles from the campus, it has four conference rooms, dining and common rooms and residence for 40 people in twin-bedded rooms.

KCTS 9 TELEVISION STATION

General Manager - R. J. Meyer

This provides public television (as opposed to the commercial stations) for the Pacific Northwest - its transmissions can be received over two-thirds of the State of Washington and southern British Columbia. The licence is held by the Board of Regents of the University of Washington who provide some grant towards its costs and the station also receives some Federal grant on an annual basis. However a large part of the operating costs must be met from grants for specific programmes or donations from the general public. The actual production of programmes involves extra costs over and above the normal operating costs and further sources of finance need to be sought for these. The September 1974 issue of 'Nine' - the news bulletin issued by the station - refers to the hopes of a new building on the campus, of updating its studio equipment to deal with colour television, and of Congress increasing the Federal grant and assessing this over a five year period instead of annually. (The British Broadcasting Corporation's financing over a five year period is quoted as an example - but no mention is made of the television receiving licence fee paid for by the British public!)

The transmission time is split up:-

a) 50% Courses for teachers - financed by the School Boards and fees from courses.

b) 20% Continuing Education - financed by the Continuing Education Divisions of the University from their budgets and course fees (see Telecourses above). KCTS 9 provides the facilities; Continuing Education have their own Producer and arrange the academic content.

c) 30% Programmes for the general public on cultural and public affairs.

Most of the programmes under (b) originate from the KCTS 9 Studios but a large proportion of those under (a) and (c) are bought in from the Public Broadcast System to which KCTS 9 pays an annual subscription. Many people in Washington and British Columbia are appreciative of the quality of the programmes for the general public and send donations to help to keep the service going. The 'headliner' programme starting mid-September 1974 was Alistair Cooke's 'America', and programmes originating from the BBC are included from time to time.

Some programmes are designed to update members of a particular profession and are financed by their professional association. However, in some cases, there is the problem that the nature of the programme may possibly cause concern to the uninitiated general public, for example, in the case of veterinary or medical programmes. These are sometimes broadcast outside normal transmission times with notification provided only to members of the association - more elaborate methods of achieving secrecy involve the use of scramblers at transmitting and receiving ends, or recording on video cassettes which are transported to the receivers.

viii) OREGON STATE UNIVERSITY, CORVALLIS

This proved an interesting visit since it showed a different approach to extension work arising from the background of Oregon University as the Land Grant University of the State and also the operation of the Co-operative Extension system in the United States. There are three sections involved in different aspects of continuing education - The Co-operative Extension Service; General Extension or Continuing Education: and the Teaching of Adult Educators in the Department of Adult Education.

Co-operative Extension.

This is a state wide system based on Oregon State University and assisted by federal funds. The historical origin of co-operative education in Oregon dates from 1905 when some local bodies, including the Chamber of Commerce, financed classes to improve agriculture and in 1914 the Smith Lever Act provided grants in aid from federal funds to match funds produced by the state for the purposes of encouraging extension work. Originally it was concerned only with the improvement of agriculture, but soon became involved in activities for farmers' wives and children and it still runs the 4-H programme for children between the ages of about 9 and 14 - the title is understood to refer to health, heart, head and hands.

Currently the Extension Service has about 250 staff, of which 150 are field staff distributed throughout the State and the remainder are specialist staff and administration in the headquarters at Oregon State University. In the main, co-operative extension is self-contained as far as staffing is concerned. It works through agents (field staff) distributed through the State and the main job of the specialist staff at headquarters is to instruct field staff in the latest information and also in techniques of adult teaching. Hence, in addition

to specialists in various subjects, the headquarters also has its own training staff providing 'in service' courses for the field staff. In limited cases, the Co-op Extension may call on experts from another State or on the headquarters federal staff or, occasionally, on staff from academic departments of Oregon State University.

The fees charged for courses are very small and an approximate split of the sources of finance is as follows:- Oregon State 50%, Federal funds 25% and County funds 25%. Of their current activities three are worthy of special mention - courses run throughout the State, dealing with pest control and better methods of agriculture; instruction on food preservation; and a Summer School run on the campus for 1,500 twelve and thirteen year olds who are members of 4-H Groups throughout the State. Food preservation is of current concern to wives and four video tapes on canning have been made which are used by the field staff for instructing the Women's Study Groups in every County of the State - about 18,000 women are involved in this programme. In Portland it is supplemented by a 'hot line' where wives can ring for advice on food preservation. This scheme is apparently working very well.

My host was Dr. Ann Lichfield, the Assistant Director for Co-operative Extension and the Head of the Home Economics section.

Division of Continuing Education

While situated on the campus in Corvallis, this Division is a State-wide operation and the Director, Dr. Duane Andrews, is responsible to the Chancellor for Higher Education in the State of Oregon. The Division is responsible for organising and co-ordinating the contributions of all higher educational institutions in the State in the field of continuing education. This includes both the State institutions and those private institutions willing to co-operate and apparently most of them do so. An Assistant Director is located on each campus through whom classes are arranged drawing usually on Faculty from that campus. An overall programme is publicized covering a wide range of general interest subjects. The fees charged for these courses have to cover all the running expenses and hence are appreciably higher than those charged by the Co-operative Extension referred to above.

The Department of Adult Education

This Department is active in the training of adult educators who may be working in the extension service or in any aspect of continuing education at the University, Community College or School level.

The qualification of Master of Education, with a major in Adult Education, requires one full academic year spent on the campus, or alternatively approximately half of the courses can be taken part-time while in employment but the remainder must be completed while in residence. About two-thirds of the time is devoted to Adult Education while one-third is spent on an option selected according to the student's interests - some 23 are available, ranging from Agriculture to History, and Home Economics to Science. The courses in Adult Education comprise:-

Education for Adults
Adult Development
Field Experience in Adult Education or Extension
Leadership Development in Adult and Community Education
Program Design for Adult Education
Instructional Methods
Research Procedures in Education.

Dr. M. Colbert and Dr. T. Grigsby are concerned with the operation of this

curriculum and I was asked to join Dr. Grigsby and 75 students for a three-hour evening seminar on the Adult Education system in Britain. This developed into a very interesting and worthwhile experience.

Self-Learning Center, School of Forestry

A brief visit was paid to this Center to examine the work being done in developing tape-slide presentations for instruction related to individuals or small groups.

The Self-Learning Center started for the teaching of the subject of dendrology (study of trees, including their types and Latin names) to undergraduate students taking Forestry degrees. The student is able to sit in a study carrel with a tape-slide presentation which will show him the different types of trees and at the same time give a spoken commentary of the relevant details. As a further development, the student can borrow tapes, tour the Arboretum and, when by the appropriate tree, then turn on the commentary so that he can see the points in situ. The system has been further developed to cater also for post-experience training related to Forestry which can be available to practitioners working on the job. There is a range of tape-slide presentations for hire, dealing with topics such as forestry practices, wood preservation, wood products and topics related to occupational health and safety.

I had the opportunity of seeing a 15 minute presentation in the latter category, which dealt with the problems of noise in the wood products industry, particularly in saw mills. The slides comprised photographs taken on site and artists' drawings to illustrate particular points; the commentary was concisely worded and the whole presentation was very effective. It was particularly interesting since Loughborough University has also developed an instructional package on noise under the Leverhulme Project 'Education in Industry' which includes three colour films, self-study and a short course on the campus.

ix) UNIVERSITY OF CALIFORNIA, BERKELEY

University Extension - Dean M. R. Stern, A.M.

The University of California is a complex organisation with one of its nine campuses at Berkeley across the Bay from San Francisco. Extension is a large scale activity at Berkeley with an annual enrolment of about 50,000 students in some 1,300 different programmes of instruction. It is also reported that the annual budget is of the order of three million dollars derived entirely from student fees since no financial support is provided by the State. There is a great extent of activity covering all aspects of continuing education and using many types of instruction.

The Extension Division is the organisation through which all extension work at Berkeley is conducted and it draws on a wide range of teaching resources from the faculties at Berkeley and other experts from elsewhere. Classes take place on the Berkeley campus, in the University Extension Centre in the City of San Francisco or, at times, in schools, colleges or other buildings. The professional staff of the Division act as originators, co-ordinators, and managers of extension activities within their field of activity - e.g. Management; Education; Engineering; City, Regional and Environmental Planning; Science and Mathematics; Arts and Humanities; Film making and Television; and others. In addition, other staff members are concerned with Independent Study, the Extension Media Center and with administration.

'Lifelong Learning' is a bulletin, published quarterly, which lists the

forthcoming activities - the range, variety and novelty of the list is most impressive - the word 'novelty' being used in the innovatory sense of dealing with problems and interests in many fields which are of current concern.

The stated aims of Extension are to cater for personal cultural enrichment, growth in a person's occupation, social improvement and the development of an informed and responsible community. Dr. Stern, the Dean, forsees the established faculties becoming more involved, and ultimately taking over, part-time credit work; a great expansion in continuing professional education on a co-operative basis between Extension and the professional schools in the University; and a further development of general cultural education particularly in inter-disciplinary areas including the natural, biological and social sciences - environmental problems are cited as an example. Continuing professional education is likely to acquire some compulsion, since California (and other states) are formulating laws which will require practitioners to undertake continuing education to maintain their licences to practise; the fields accountancy, optometry, pharmacy and veterinary medicine are under consideration from this point of view.

In such a large operation, it was not possible to investigate all aspects of extension work and the following notes give further information about some of those discussed.

Continuing Education in Engineering. Professor R. C. Grassi, Professor of Industrial Engineering and Operations Research in the College of Engineering, has recently taken up a half-time appointment as Chairman of Continuing Education in Engineering. He says he is finding this an interesting appointment which broadens his activities and enables him to assist his colleagues to orient towards short course work with experienced adults. The number of short courses (usually of 2 - 5 days duration) is currently about 25 per year and is increasing despite competition from some of the professional engineering institutions who have started running their own courses.

Short courses usually deal with current problems or 'the state of the art' in various branches of engineering, drawing on members of the faculty and outside specialists. Professor Grassi has responsibility for all decisions concerning the planning, publicity and finance (they are required to be self financing including payment of overheads). In addition, 'Review' classes are offered to provide refresher training for Civil, Mechanical and Electrical Engineers; these usually take place on one evening a week for about twelve weeks and a typical fee is $70. Professional credit can be gained for completion of review classes, which can be relevant in fulfilling requirements for professional standing, though is not acceptable towards an undergraduate degree. These courses are approved by a faculty committee which considers Professor Grassi's recommendation.

City, Regional and Environmental Planning. Dr. Warren Jones is Chairman of Extension in this area and also holds a half-time appointment in the College of Environmental Design. Seminars, workshops and lectures for professionals concerned with planning and the environment are provided as well as some aimed at informing the general public. Fees for attenders are usually in the range of $60 - $75 per day and lecturers are drawn from academic faculty and those in practice in appropriate fields.

Extension and the Department of City and Regional in the University also run a Certificate Programme in City Planning for those who cannot attend a full-time master's course in planning. The first certificate was awarded in 1974 and over 100 others are at various stages of the four year study period. Three-fifths of them are working by correspondence while the others attend classes and seminars on the campus.

Use of Television. The College of Engineering is one of the academic institutions in the United States using television to produce 'an extended classroom'. An interesting example of this was observed when the instruction being given to a graduate class was transmitted by micro wave to another group of students in Downtown San Francisco across the Bay. They were mainly employees of the Pacific Gas and Electric Company, on whose premises the subsidiary class was taking place, though employees of other firms in the vicinity were also included. All were registered students for the Master of Science degree and were required to attend some other classes on the campus. The purpose of this TV link was to eliminate the travelling time of about two hours associated with visiting the campus for at least some of the classes which the students were required to take. It also enabled them to partake in the regular daytime classes thus avoiding the extra cost of running duplicate classes in San Francisco.

In this context, the TV link served a useful purpose in assisting these part-time students. However, the presentation involved only the black and white visual image and sound of the instructor lecturing and using the black-board, and I doubt whether this would be sufficiently effective for students who were less motivated than these students obviously were or if this use of TV were the sole means of instruction. Better 'talk-back' facilities were being developed so that students could ask questions of the instructor and this will make some improvement.

The Executive Program

Since 1959 the Graduate School of Business Administration, in co-operation with University Extension, has offered a four-week residential Executive Program, once or twice per year. It is designed for members of upper management in business and government from the United States and other countries and aims to give them an understanding of the broad environmental changes which they must recognise in operating as decision makers. Economic analysis and forecasting form the core of the seminar programme reinforced by the consideration of legal, social, political, manpower, and scientific aspects of change. Members of several faculties contribute to the Program as well as those drawn from other institutions, business and government. The fee is $2000 including residence and all books and instructional materials.

The Master of Business Administration Program

Dean of the Schools - Professor R. H. Holton, Ph.D.

The Graduate School of Business Administration can trace its origins to a College of Commerce established in 1898 and currently has over 500 students enrolled in M.B.A. and Ph.D. programmes. Many study full-time on the Berkeley campus but, in the context of this report, mention should be made of the evening M.B.A. programme offered in Downtown San Francisco. This has the same registration procedures through the Graduate School as for the regular programme; the curriculum is similar and instructors are drawn from the Graduate School for whom it forms part of the teaching load.

San Francisco is a business centre concerned with banking, finance, transport and services rather than with manufacture and this is reflected in the curriculum. Seven basic courses are required of all students and the remaining five courses permit a specialisation in finance or in general management. About 200 students are registered and completion of the requirements for the M.B.A. is likely to take three to four years taking classes on one or two evenings per week. The fee is of the order of $350 per year for a resident of California and appreciably higher for a non-resident.

x) UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

The San Francisco campus has four faculties - Medicine, Dentistry, Nursing and Pharmacy, each of which has an Assistant Dean responsible for Continuing Education. Their activities are co-ordinated and assisted by the Vice Chancellor for Public Programs and Continuing Education (Dr. S. M. Farber M.D.) and the Assistant Vice Chancellor, Dr. Lucy Ann Geiselman, who has a Ph.D. in Education and joined the San Francisco campus recently.

All courses are required to be self-financing including a levy which recuperates the costs of running Dr. Geiselman's office. Under a new trial scheme, any surpluses may be retained by the faculty which sponsors the course. The requirement for self-financing works satisfactorily when high course fees can be charged (usually the case in Medicine) but can limit activities in other areas such as Nursing. Grant assistance is being sought for the development of inter-disciplinary courses (e.g. Medical and Nursing) and of general educational courses for health sciences staff.